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Information Book on
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Royal Quality

Vegetable and Farm Seeds

Victory
Garden
Number



Rudy-Patrick Seed Co.

Kansas City, Mo.

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*Sold By*



# RUDY-PATRICK SEED COMPANY

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KANSAS CITY, MO.

WHOLESALE SEED  
REFINERS, GROWERS  
AND EXPORTERS

## Royal Brand Seeds Real Producers

THIS CATALOGUE is intended as a complete reference book on the best varieties of farm and garden seeds. We do not conduct a mail order business direct with consumers. Our seeds are sold by thousands of live, progressive merchants and jobbers throughout the country. This patronage over a period of many years is the result of the dependability, hardiness and productiveness of our high grade selected seeds. Our seeds are grown in those sections of production which our long experience has shown to reach their fullest development as to type and strain. Likewise, our seeds are selected as to their adaptation to the sections in which we sell. To use cheaper and unknown seeds is to risk poor crops and unsatisfactory stands.

We maintain a complete laboratory for analyzing and testing the seeds we send out, thus insuring tested stock at no increased cost.

Our organization, developed through a third of a century of growth, is composed of men of ripe experience, trained in the technical demands of this exacting business, whose life work is dedicated to the promotion of better seeds and larger crops. In addition to the executives, who guide the policy of this business, is a large force of capable office, plant and field workers, seed analysts, cleaning and refining experts, field buyers and inspectors, feed millers, credit men, traffic men, etc.

A very few communities raise sufficient seeds for their own consumption. Even when some farm seeds are produced in a particular section, they may not be fit for seeding. They need to be analyzed in the laboratory for noxious weeds, to come under the eye of the experienced cleaner. Home-grown vegetable seeds are not as a rule successful as they are apt to be mixed, hybridized, and often of doubtful germination. Modern scientific methods in large scale breeding and development of vegetable seeds have superseded the advisability of saving home-grown seeds as in our grandfather's day. Why experiment when the services of a large concern are at your service? Any slight increase in price over home-grown or cheaper seeds is more than offset in the increased results per acre and larger yield in bushels and tons.

Then, too, our machinery and equipment is the most improved and modern. Our seeds are refined by new processes, special screens, air blasts, gravity separators, etc. All perform their minute operation, almost with human touch, and the many thousands of farmers and gardeners who intrust their seed orders to the merchants handling our seeds, reap the benefit.

When the season for planting is on, large stocks must be quickly available. Our orders are usually shipped the same day they are received.

**REAL SERVICE**, not only in preparing seeds, but in getting them to the consumer, as needed, is our slogan.

The reliance on the reputation and responsibility of seedsmen is more important than other vendors of goods and services as they deal with the life germ of the seed in the eternal cycle of plant production.

As crops are subject to the human element in sowing and reaping; governed by soil and seasons and the divine chemistry of nature, there can be no guarantee of results by anyone in the cycle of production. It is, therefore, sound sense to rely on the personnel, laboratory equipment and reputation of a large seed house as Rudy-Patrick in order to safeguard as much as human experience and resources may permit. In common with other seedsmen we are forced to follow the nature of our business in respect to non-warranty of seeds and all goods are sold under the usual seedsmen's non-warranty disclaimer.

The Rudy-Patrick Seed Company gives no warranty, express or implied, as to the productiveness of any seeds or bulbs it sells and will not be in any way responsible for the crop. Our liability, in all instances, is limited to the purchase price of the seed.

RUDY-PATRICK SEED CO.





# Royal Quality Seeds

We list the main tried and tested sorts of vegetable seeds available through dealers and jobbers for the home and market gardener, also for the produce, canning and freezing industries. The seed industry is constantly developing new and improved types. Do not confuse inferior strains under the same trade name with our Royal quality selected and bred seeds.

## *Victory Vegetables*

We are now engaged in a total all-out war against the despotic Axis powers. Life, liberty and free institutions are at stake. All our resources are being organized for this terrific struggle. The food problem looms large in this national effort. "Foods," says Secretary Claude Wickard, "will win the war and dictate the peace." Not only staple cereals and pasture lands for livestock production are vital but equally so fresh and canned vegetables are absolute necessities for our armed forces and our civilian population. Our national economy therefore demands that each and everyone of us do our part in vegetable production. Aside from energy values, vegetables are important sources of vitamins and minerals in the country's diet. For reasons then of national health, morale, economy and sustenance we should respond to the nation's call for VICTORY GARDENS.



## ASPARAGUS

**CULTURE**—Is a delicious spring vegetable. Produces best when planted in well drained soil with southern exposure. One ounce of seed will sow 40 feet of drill; 2 pounds produces enough roots for an acre. A year may be saved by buying plants and setting them out in rows 4 feet apart and 2 feet apart in the row.

**MARY WASHINGTON**—An improved delicious variety, with large deep green sprouts.

## BROCCOLI

Closely allied to the Cauliflower. In growing Broccoli, a seed-bed should be prepared and the seed sown in May. The plants will be ready to transplant late in June or early in July, and should be set in very rich mellow ground, in rows about 2½ feet apart, leaving 18 inches between the plants.

**ITALIAN GREEN (Calabrese)**—Is the best sprouting sort for all purposes. Resembles a fine head of Cauliflower with compact large green cluster of buds. Plants are 20 inches tall, leafy, with blue-green foliage.

## BRUSSELS SPROUTS

A species of the Cabbage family, which produces miniature heads from the sides of the stalk. These heads are a great delicacy, cooked in the same way as cauliflower. Sow seed about the middle of May, in a seed-bed, and the plants afterward set in rows 2 feet or more apart, and cultivate like cabbage.

**LONG ISLAND IMPROVED (Paris Market)**—Grows dwarf and compact. About 20 inches tall with round cabbage-like balls of 1½ inches in diameter. Very desirable sort.

## BEANS

**CULTURE**—Require good, well drained, manured soil. Do not plant until ground is dry and warm. Sow in drills from 2 to 3 feet apart; 1 to 2 inches deep, plant 2 to 3 inches apart in the drills. Use one pound to 100 feet of drill, 50 pounds to the acre. For season's supply, plant at intervals of one to two weeks until midsummer, cultivate shallow and never when foliage is wet.

### DWARF WAX OR BUSH SORTS

**BLACK WAX PENCIL POD, 52 Days**—Produces crisp, tender, stringless pods in 52 days. Flavor is excellent. Yellow pods are 5 to 6 inches long, keeping a long time in condition for snaps. Seeds are black.

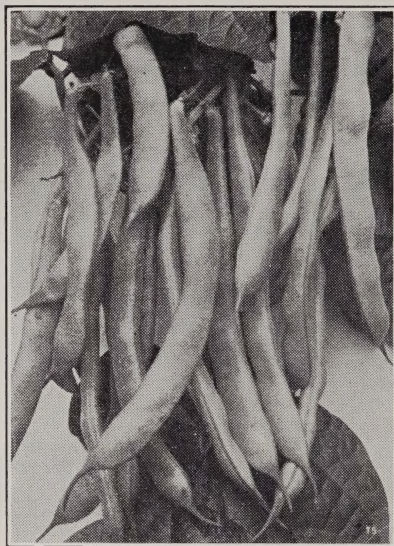
**BLACK WAX SURE CROP or BOUNTIFUL**—Is desirable for truckers and shippers as well as home gardens. Pods are golden yellow, brittle and stringless with fine texture and quality. Seeds are jet black. Produces in 52 days from planting.

**BRITTLE WAX or ROUND POD KIDNEY, 58 Days**—Has superior quality for both canning and home use. Produces vines from 14 to 15 inches tall and pods 5½ to 6½ inches

long which are of excellent quality and absolutely stringless. Color of seed is white with dark brown to black irregular eye rings. A very fine sort.

**DAVIS STRINGLESS WHITE WAX, 52 Days**—Is valuable for shipping to market. For family use, should be picked quite young. Seed is kidney shaped, pure white. The dry beans are excellent for cooking.

**GOLDEN WAX IMPROVED, 51 Days**—This is one of the most productive, earliest dwarf beans for the market or home garden. Pods are 5 inches long, broad, flat, a golden yellow and stringless. Seed is white, covered with purplish red. An old standard sort, but is hard to surpass.



Golden Wax

**GOLDEN WAX TOPNOTCH, 51 Days**—Plants medium, small, compact; pods golden yellow, 5 inches long, brittle and stringless. Seed is white with brownish marking about the eye. Has an excellent buttery flavor and is a heavy yielder.

**UNRIVALED WAX, 53 Days**—Plant is dwarf and stocky with light yellow, narrow, brittle pods 4½ inches long. Seed is small, glossy, golden brown; high quality.

**WARDWELL'S KIDNEY WAX, 55 Days**—Is early, hardy and productive. Makes long, flat, brittle yellow pods. Seed is kidney shaped, good sized, white, with dark markings at the eye. Deserves a place in every garden.

### DWARF GREEN POD OR BUSH SORTS

**BOUNTIFUL STRINGLESS, 48 Days**—A green-pod bush bean which bears very early and continues throughout the season. Pods beautiful rich green, very thick, broad, long and uniform; meaty, tender, fine quality; stringless until quite old. Can be used as dry bean for winter use. A splendid market variety. Seeds solid straw color.



**BURPEE'S STRINGLESS, 53 Days**—It produces in profusion long, straight, round, deeply saddle-backed pods early in the season. The pods are absolutely stringless at all stages of growth, brittle, tender, and of real good flavor. One of the finest for home use. Seeds coffee brown.

**BLACK VALENTINE STRINGLESS**—Is an improved type of the old-fashioned Black Valentine; good shipper; pods uniform, silvery green and entirely stringless. Seeds solid black.

**FULL MEASURE, 52 Days**—As its name implies, is a fine yielder of meaty, brittle, stringless pods 6 to 7 inches long. A most excellent bean for the home and a money maker for the market. Seeds reddish brown, mottled with buff.

**GIANT STRINGLESS, 53 Days**—Produces medium green, tender, crisp pods averaging 5 to 6 inches long. Market gardeners prefer this sort, because of its productiveness. Is fine for canning. Seed is of medium size; in color, a yellowish brown.

**HORTICULTURAL DWARF (Ruby), 52 Days**—A late variety that is very productive of broad, flat stringless pods. One of the best sorts for use as a Shell Bean. The dry beans are large, oval, nearly covered with splashes of bright red. The pods are green when young but when mature are yellow splashed with red.

**LANDRETH'S STRINGLESS**—Very similar to the original Burpee's strain but somewhat more vigorous and productive.

**PLENTIFUL, 50 Days**—Received All-American award in 1939. Equally desirable for shipping or for the home and market garden. Bears long green pods which are brittle, stringless and of fine flavor. Seeds are large, flattened, oval, glossy, jet black.

**RED VALENTINE ROUND POD, 52 Days**—An extra early variety that usually matures in 52 days; also fine for midsummer sowing, to ripen in September. The vigorous bushes bear an abundance of medium-length green pods which are very fleshy, crisp and tender. Dry beans are of medium size, long, pink, marbled red.

**REFUGEE STRINGLESS**—Produces a large, hardy plant, very productive. Pods uniform, medium green, 5½ inches long and absolutely stringless. Seeds dark violet purple, splashed with buff. This is an improvement on the old Refugee 1000 to 1.

**TENDERGREEN STRINGLESS, 54 Days**—Very desirable new sort for home and market garden. Produces a sturdy prolific vine 15 to 17 inches high with pods 4½ to 6½ inches long, round which are tender, brittle and absolutely stringless. Seeds are brown, mottled, blotched with light fawn.

**TENNESSEE GREEN POD (Brown Bunch), 54 Days**—Is the longest podded dwarf sort, often 6 to 7 inches, good size and of fine flavor. Is heavy cropper. Seeds yellowish brown.

## FIELD OR BAKING SORTS

**GREAT NORTHERN**—Somewhat larger than Navy Beans. Is heartier and heavier yielder. Pods 3 to 4 inches long.

**MEXICAN CHILI (Idaho Red)**—Is the well-known Chili Bean of commerce.

**NAVY or MARROW PEA**—Ripe in 100 days—Used largely for the dry seed. Is the Navy Bean of commerce. Famous as "Boston Baked Beans." Dry beans are small and white.

**PINTO or MEXICAN**—This valuable bean is raised extensively in the west, withstanding dry weather well.

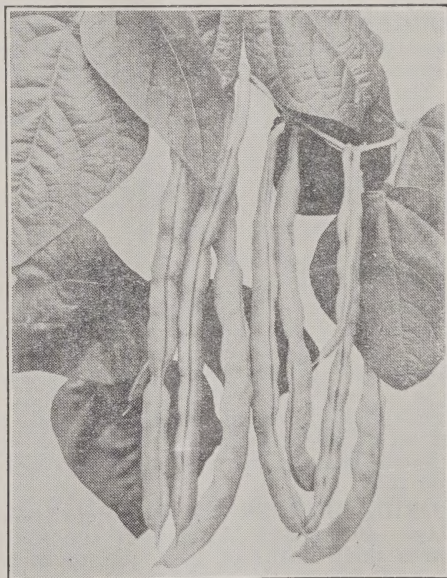
**RED KIDNEY**—A standard old variety that is grown almost exclusively for the dried beans, which are long, oval, and deep red in color.

## POLE BEANS

**POLE BEANS**—Are sensitive to cold and should be planted two weeks later than bush sorts. Set poles three feet apart in the row, making the rows 4 feet apart and extending north and south. Sow half dozen beans 2 inches deep around each pole; thin later to 4 plants. Can be trailed on wire netting as well.

**CREASEBACK WHITE (Blue Lake), 62 Days**—The pods grow in clusters and are from 5 to 6 inches in length, perfectly round and deeply creased. They are very fleshy, stringless and of the best quality. The beans are white and are excellent shelled for winter use. Good canner.

**CREASEBACK STRIPED (Cornfield, Scotia), 72 Days**—Standard old sort for snap bean use. Good climber, bearing a brittle, tender, almost stringless bean 6 inches long. Seed is buff with black stripes.



Kentucky Wonder

**CUT SHORT or CORN HILL, 75 Days**—Is often planted in corn. Snaps are short, about 3½ inches. Seed grayish white, dusted with purplish red brown. Widely known and cultivated.



**DUTCH CASE KNIFE, 65 Days**—A climbing variety with long, flat, irregular pods, which become creamy white as they mature; seed broad, flat and clear white.

**KENTUCKY WONDER or OLD HOME-STEAD, 65 Days**—An old favorite, but hard to surpass for its showy pods of excellent quality. Pods are fleshy, crisp, long bearing and delicious; seed long, oval and dun in color.

**KENTUCKY WONDER WAX**—Quite similar to the Kentucky Wonder or Old Homestead, except in the color of pods, which in this one are light waxy yellow. It has a thick, broad pod, very tender, of delicious flavor and stringless. The pods often attain a length of 8 to 9 inches.

**LAZY WIFE (White Cranberry), 74 Days**—A great snap bean with pods up to 6 inches long, which are stringless, flat, fleshy, brittle, of delicious quality. Dry beans are round and white.

**LONDON HORTICULTURAL or SPECKLED CRANBERRY, 70 Days**—Adapted for home and market gardens, alike for snaps and green shell beans. Pods flat, oval, dark green when young, red splashed, flecky and stringless. Seed large oval, buff color splashed with dark red.

**MISSOURI WONDER, 66 Days**—A splendid pole bean. Popular in the west and south. Is a good corn hill bean. Yields well and bears long, plump, well-filled, crease-backed pods. Is popular for green shell beans.

**TENNESSEE WONDER (Egg Harbor), 70 Days**—Good climber with large, straight, handsome, round, light green pods. Seed slate gray with long dark olive green stripes.

**WHITE SEEDED KENTUCKY WONDER or BURGER'S STRINGLESS GREEN-POD**—Uniformly straight, 6 to 8 inches in length, rich green, and very meaty; entirely stringless. The white beans are fine for winter use. McClaslan is quite similar, perhaps a little earlier.

## LIMA BEANS

### POLE LIMAS

The Limas being more tender and liable to rot in the ground if it is cold and wet, must be planted later—about the last of May or first week in June. Plant about two inches deep.

**CAROLINA or SIEVA LIMA, 77 Days**—This is a small type of the pole limas. It matures quickly, produces immense crops, and makes an excellent bean for winter use. The pure butter bean of the sort, vigorous climber, 10 feet tall.

**FLORIDA BUTTER (Speckled Pole Limas), 77 Days**—Bears well throughout the season. Produces small beans of good quality in both green and dry state. Popular in the south. Pods in clusters with 3 beans to the pod, color buff spotted with reddish brown.

**KING OF THE GARDEN LIMA**—Vines very vigorous and productive. Pods medium dark green, very large, 5 to 6 inches long, broad, flat, filled with four or five immense white beans of finest quality. On account of its large pods, it is a favorite with market

gardeners. Seed very large, flat, white, with slight greenish tint.

**LARGE WHITE LIMA**—The old-fashioned Pole Lima. Long, thick pods and large, meaty beans of good quality. Dry beans resemble King of the Garden very closely.

### DWARF LIMAS

**BUSH LIMA HENDERSON'S, 65 Days**—Extremely early; vines are without runners, but continue to grow and set pods until frost. Pods are short and contain 3 to 4 beans which are of fine quality, either green shelled or dry. Seeds small. Sometimes called Baby Limas, favorite with canners, is the bush form of Sieva Limas.

**BUSH LIMAS, FORDHOOK (Potato Lima), 71 Days**—Stiff, strong grower and very heavy cropper. Pods 4 inches long, 1½ inches wide, containing 3 to 4 seeds; green shell; beans large, plump, sweet and juicy; dry beans very large and plump, white.

**BUSH LIMAS, SPECKLED JACKSON WONDERS**—Flourishes under dry conditions and is deservedly popular in the south. Pods are medium-sized, holding 4 or 5 fairly large beans of excellent quality.

**BUSH LIMA BURPEE'S, 77 Days**—The bushes grow from 18 to 20 inches high, of stout growth and always erect.

It is an immense yielder, bearing pods 4½ inches long in clusters of 5 or 6, well filled, usually with 4 large, thick beans, dry beans, large, flat, greenish-white.

## BEETS

### TABLE BEETS

**CULTURE**—Require a well manured sandy loam. Sow in rows early in May about 18 inches apart and ½ to 1 inch deep. For winter use, sow in June. One ounce sows 50 feet of drill; 5 to 6 pounds to the acre. Thin to 6 inches apart when a few inches high.

High quality beets measured in terms of uniform size, globe shape, bright, even color, fine flavor and texture, are possible only through select strains.

**DETROIT DARK RED, 68 Days**—One of the best main varieties for home or market garden. Roots of medium size, globe-shaped and very smooth; skin dark red, flesh solid vermilion red. Tops small, upright, dark green, shaded red.

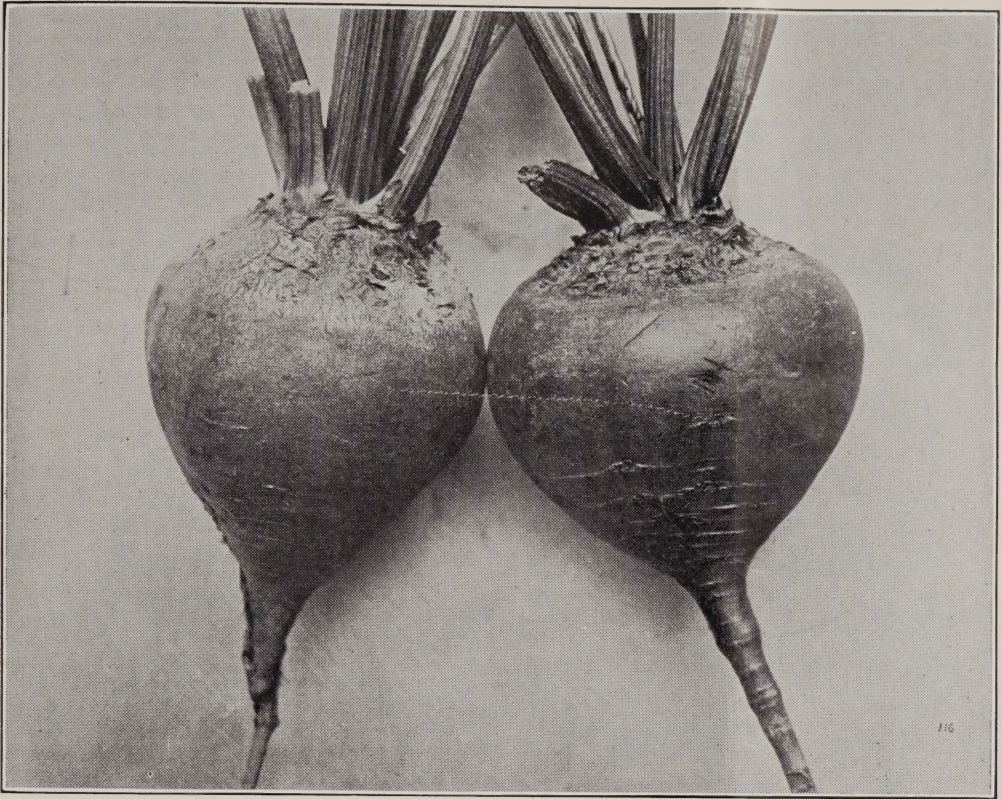
**EARLY BLOOD TURNIP, 60 Days**—Roots are dark red and nearly round, having a fine flavor. Valuable for general market or home garden. An old popular sort.

**ECLIPSE BLOOD TURNIP**—Produces globe shaped roots of rosy red, sweet and tender, within 65 days from planting. Does not grow large and is much used for bunching.

**EARLY WONDER, 58 Days**—Equally desirable for home or market purposes. Roots flattened, globe shaped, 3 inches in diameter, color dark purplish red, flesh deep crimson zoned with lighter shade, tops small.

**EGYPTIAN CROSBY'S, 60 Days**—An extra-quick grower. The flat, smooth, turnip-shaped roots average 3 inches in diameter,





Detroit Dark Red

and are dark red, zoned lighter. Fine for table use and canning and largely planted for home and market. The tops are medium, collar small.

**EXTRA EARLY EGYPTIAN, 55 Days**—Matures very early, with small tops and flat dark red roots; good forcing beet.

**LONG DARK BLOOD, 90 Days**—Keeps well through the winter. The roots, which measure 1 to 1½ feet, grow one-third out of the ground. The leaves are green veined with red and the flesh deep red. A good variety for fall and winter use.

### SWISS CHARD or SPINACH BEET

This variety does not produce an edible root like the regular garden beet, but is esteemed for the broad, white leaf stalks, which are cooked and served in the same manner as asparagus, making a most delicious vegetable. The leaves are also cooked like spinach and considered equally palatable.

**LARGE RIBBED DARK GREEN (White Silver)**—The leaves are slightly crumpled with dark, glossy green, the stems and mid-ribs are clear white, broad; its flavor is superior.

**GIANT LUCULLUS**—Produces white thick stalks in 53 days. Tops cook up very much like spinach, while the stems cooked taste very much like celery.

## MANGEL-WURZEL AND SUGAR BEETS

**CULTURE**—The following varieties are extensively grown for feeding stock, and are excellent food to increase the flow of milk. As they grow much larger than the varieties cultivated for table use, they require more room, and should be sown in drills about 2 feet apart. The seeds should be dropped about 2 inches apart in the drills, and when strong enough, thinned out to 12 to 15 inches in the row. The long varieties are best suited to a deep soil, and the globe sorts succeed better than the long sorts on sandy soil. When drilled 6 pounds of seed will sow an acre.

**GIANT HALF SUGAR ROSE (Feeding Sugar), 90 Days**—A most valuable, large yielding variety for feeding; roots oval-shaped; skin rose colored, flesh white. Has a larger sugar content and feeding value than most beets of its class.

**GOLDEN TANKARD, 102 Days**—A smooth, yellow-fleshed mangel; yields large crops on good land and is easily harvested. The roots are heavy and solid, of a typical tankard shape. The flesh is firm and the roots are excellent keepers. Extensively grown for stock feeding.

**LONG RED MAMMOTH, 110 Days**—An old, popular sort. This is the heaviest cropping and largest of all mangels. The roots grow half to two-thirds above the surface



and are frequently 2 feet or more in length by 6 inches in diameter. Skin bright red; flesh white, veined pink.

**KLEIN WANZLEBEN SUGAR, 90 Days—**

The roots are 7 to 8 inches long. They can be grown as close as 5 inches apart in the row and 2 feet between the rows. An enormous yield, grown extensively for sugar.



**Copenhagen**

## CABBAGE

**CULTURE**—Select a moist, heavy, rich soil for cabbage. For winter crops, sow in the middle of spring and transplant to the field when 4 to 6 inches high in rows 2 to 3 feet apart. The early varieties should be sown in hot-bed or box in the house about 6 weeks before the plants are to be set out. When the soil is suitable in the spring, transplant to the field in 3-foot rows, 18 inches apart. Cultivate early and often. Half pound of seed will produce sufficient plants for one acre.

### EARLIEST SORTS

**EARLY WINNINGSTADT, 77 Days—**Heads are hard and pointed. Is quite early with thick dark green leaves; a desirable sort. Weight, 5 pounds.

**EARLY JERSEY WAKEFIELD, 62 Days—**Considered by many expert gardeners the best of the early varieties, being grown for home use and shipping. Its outstanding merits are large pointed heads, small outside foliage and very sweet. Weight, 2½ pounds.

**EARLY CHARLESTON LARGE WAKEFIELD, 71 Days—**Similar to Jersey Wakefield, but a week later, somewhat larger with blunt pointed heads.

**COPENHAGEN MARKET, 66 Days—**Excellent for early market purposes, also good kraut variety. Has short stems, round heads, solid interior, clear white and of excellent quality. Weight, 4 pounds.

**MARION MARKET—**Is a Yellows resistant strain of Copenhagen.

### SECOND EARLY SORTS

**ALL SEASON, 90 Days—**Is a leading variety for the home garden, also good kraut sort. Heads are large, oblate shaped, solid and of fine quality. Stands hot seasons remarkably well. Weighs 9 to 10 pounds.

**ALL HEAD EARLY, 78 Days—**Heads are medium flat, slightly rounded at the top, 7 inches deep, uniform and solid. Weight, 6 pounds.

**EARLY DWARF FLAT DUTCH (Round Dutch), 71 Days—**Old reliable sort for home and market garden, has short stems, heads almost ball shaped, 7½ inches in diameter, weight 4½ pounds.

**GLORY OF ENKHUIZEN, 75 Days—**This introduction from Holland is valued on account of its solid, compact, round heads of fine flavor. A splendid cabbage for early use and winter storage. Head weighs 6 to 8 pounds.



**GOLDEN ACRE, 64 Days**—The early round headed cabbage, really an early strain of Copenhagen with smaller heads. Weight, 3 pounds.

### LATE OK WINTER SORTS

**MAMMOTH ROCK RED, 95 Days**—By far the largest and surest heading of the red sorts. Used for slaw and pickling. Weight, 7 pounds.

**PREMIUM FLAT DUTCH, 115 Days**—Ours is a strain growing large flattened solid heads, considered the standard late variety for shipping or home use. Weight, 12 to 15 pounds.

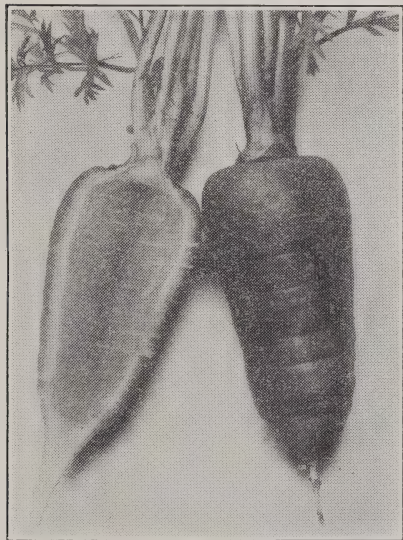
**PENN STATE BALL HEAD**—Is an all-American selection of this strain, heavy yielding with globe shaped heads, fine for winter storage. Weight, 5½ pounds.

**SUREHEAD, 115 Days**—For main crop or home garden, this variety is equally valuable. Extra hard, large, weighing 8 to 9 pounds each, globular heads, has established Surehead as a favorite kind.

**CHINESE or CELERY CABBAGE**—A most delectable vegetable resembling Cos lettuce when full grown. Is eaten raw or cooked. Retains its crispness and flavor longer than lettuce. This is one of the main ingredients in chop suey.

**WONG BOK, 80 Days**—Matures firm heads 8 to 10 inches tall during the summer months; is tender, sweet, well blanched and regarded as the leading strain of Chinese cabbage.

## CARROT



Danvers

**CULTURE**—Carrots are an excellent source of vitamin A and a valuable health food. Our special strains show improved flavor, color, size and shape. Plant seed ½ inch deep in well prepared soil in rows 16 to 24 inches apart, later thin to 2 or 4 inches in the row. Continuous plantings may be made from early spring until June. One

ounce will sow 100 feet of drill, 3 pounds to the acre.

**CHANTENAY or MODEL, 70 Days**—Characterized by its great productivity and fine grained sweet orange flesh. It grows a 5-inch root about 3 inches in diameter.

**RED CORED CHANTENAY** strain is popular with canners and gardeners because of its reddish-orange flesh with indistinct core of nearly the same color; sweet and tender.

**DANVERS HALF LONG**—We recommend this kind as best adapted for all purposes. Has orange roots with broad shoulder and medium sized core of light orange; is 6 inches in length and 1¼ inches in diameter. Valuable for home garden, market bunching or stock feeding.

**BAGLEY**—Is a strain of Danvers of a somewhat larger type.

**IMPERATOR**—A splendid sort, grows roots 7 to 8 inches long and about 2 inches in diameter, maturing 77 days from planting. Has a red orange color, fine grained and tender.

**LARGE WHITE BELGIAN, 100 Days**—Grows one-third or more out of ground. The roots attain a length of a foot or more and average about 3 inches in diameter. The coarse flesh, and also the skin, is pure white, with an occasional tinge of green where growing above soil. One of the best varieties for stock feeding.

**LARGE YELLOW BELGIAN, 100 Days**—Like the preceding in every respect but flesh and skin pale orange.

**LONG ORANGE, 85 Days**—This is a distinctive sort, with its roots often 12 inches in length and 3 inches at the crown, its large tops and its tender deep orange flesh. Desirable both for the table and for stock feeding.

**NANTES, 68 Days**—Roots bright orange, 1¼ inches thick and 7 inches long. Useful for both market and home gardens. Good canner and freezer.

**OXHEART or GUERANDE, 75 Days**—Valuable when young for table use and later for stock feeding. Has very thick roots, about 5 inches long. Color is a bright orange and quality sweet and tasty. Grows well in poorer soils.

**RUBICON**—Belongs to the all-purpose types in the Chantenay group.

**ST. VALERY**—Is similar in general type to Long Orange.

**SCARLET HORN, 63 Days**—Fine for market or home garden. Roots measure 1½ inches in diameter and 3 inches long. Flesh is deep orange, rich and fine grained.

**TOUCHON**—Is a similar type to Nantes.

## CAULIFLOWER

**CULTURE**—Deserves a more prominent place in the home garden. Can be successfully grown by the amateur gardener. Sow early sorts in hot bed 30 to 35 days before time to transplant to open ground, when frost danger is past.

**EARLY DWARF ERFURT, 57 Days**—Produces excellent, solid pure white heads often 6 to 8 inches in diameter.

**EARLY SNOWBALL, 55 Days**—Is most popular general sort. Produces medium sized heads, compact, round, very white, with short outside leaves.

**DANISH DRY WEATHER, 70 Days**—Adapted for growing in dry regions. Heads large, 6 to 7 inches across. Weight, 2 pounds.

## CELERY

**CULTURE**—For the earliest crop the seed should be sown in a hot-bed during February or March. When the young plants are large enough and the trees are out in leaf, they are transplanted into the open. For the fall or main crop seed may be sown in the open ground as early in the spring as the soil can be worked into good condition, and the plants should be set in the rows in July.

Celery requires a rich, well-manured soil, and plenty of moisture so that it can make a continuous growth. One ounce is sufficient for 600 feet of drill. One ounce sown in the seed-flat gives 8,000 to 10,000 plants; 2 ounces for one acre.

**GIANT PASCAL**—This celery has the sweet, nutty flavor of Golden Self Blanching. The stalks are about 2 feet high; thick, solid and stringless, and as brittle as glass. Matures in 140 days. It blanches easily and is a fine winter keeper for home or market.

**GOLDEN YELLOW SELF-BLANCHING**—Dwarf sort with broad, heavy stalks which blanch to a rich golden yellow, is crisp, sweet, tender with a delicious flavor.

Tall strain for truckers is earlier than the original strain and of the same excellent quality.

**WHITE PLUME**—This is the earliest and most easily blanched celery in cultivation. The plants grow rapidly and blanch easily during the summer months. The foliage is an attractive light green color and the stalks are pure white. Crisp and nutty. An excellent home garden and early market sort.

## CELERIAC

Sow seed same as celery. Transplant in rows 2 feet apart, 9 inches apart in a row. Thorough cultivation is necessary to secure good roots. Earthing up is not necessary. Roots may be cooked or used as a salad.

**LARGE SMOOTH PRAGUE**—A very large and smooth variety, free from side roots.

## CHICORY

**CULTURE**—Sow in drills half an inch deep, in rich, mellow soil; the after culture being the same as recommended for carrots.

**LARGE ROOTED or COFFEE (Magdeburg)**—The Chicory of commerce. Roasted and mixed with ground coffee. Leaves are used for greens and feeding poultry as a tonic.

**WITLOFF or FRENCH ENDIVE**—A fine salad vegetable grown by garden specialists who bury the trimmed roots upright in damp sand, producing an attractive, compact,

blanched head 5 inches long with a pleasant acid flavor.

## COLLARDS

A tall, loose leaved cabbage-like or kale-like plant grown throughout the South. It is extensively used for the table and for stock in the South, where it continues in growth and is usable throughout the entire winter. Collards usually succeed in locations where cabbage cannot be grown to perfection.

**GEORGIA or CREOLE**—This is the wide-stemmed variety, growing 2 or 3 feet high and forming a large, loose, open head or cluster of leaves with a rather long stem. A frost, if not too severe, will improve rather than injure the quality of the leaves. Sow thickly in drills where the plants are to remain and when well started thin to 2 or 3 feet apart in the row.

**CABBAGE COLLARDS**—Is a cross between Georgia Collards and Jersey Wakefield Cabbage, producing a compact plant 2 feet high with large clusters of leaves.

## CORN SALAD

### FETTICUS or LAMB'S LETTUCE

**CULTURE**—For winter use sow shallow in rows 1 foot apart during August or September. The plants are ready for use in six or eight weeks. When winter approaches give them a very light covering of hay or straw.

## CRESS

**CURLED or PEPPER GRASS**—A hardy, quick growing annual with curled deep green foliage. Has a pleasant, spicy flavor and much used for garnishing.

**WATER CRESS**—Is an aquatic plant of perennial nature producing bright green leaves with pungent flavor used for salads and garnishing.

## SWEET CORN

A steady supply during the season of tender, delicious, sweet corn should be on every table.

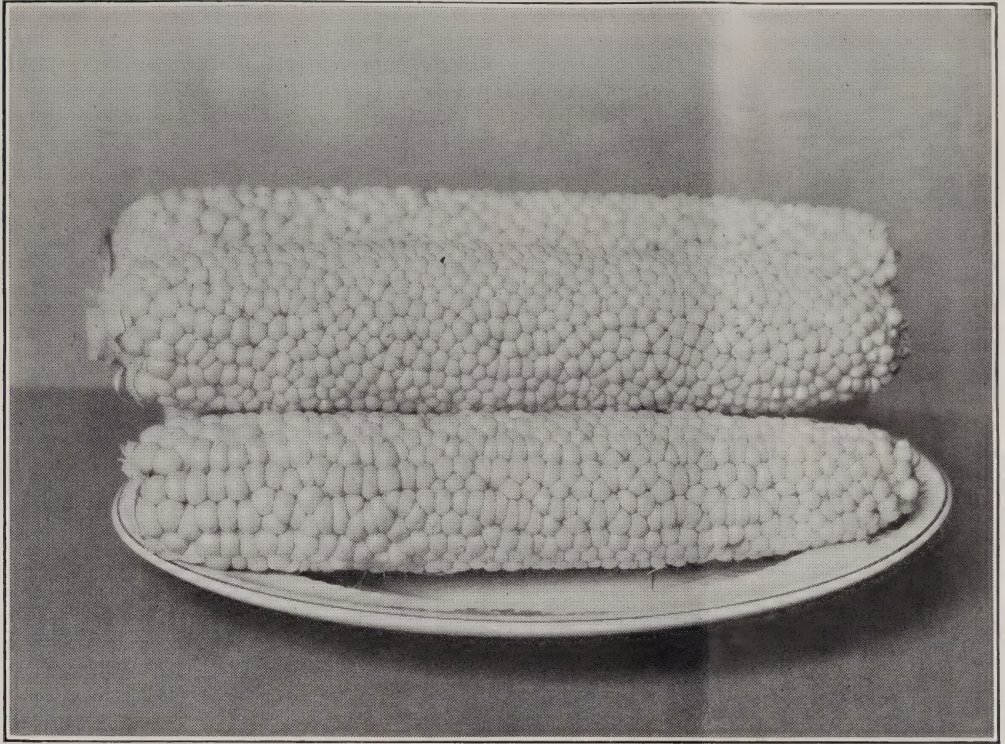
**CULTURE**—Good ordinary soil, well worked, is the first requirement. Plant as soon as frost danger is over, about last of April, in rows 3 feet apart, and, if in hills, the same distance apart in the row, using 4 to 6 kernels to a hill. Cover 1 to 1½ inches deep. Cultivate shallow, but often until the tassels show. One pound will plant 275 hills, 15 pounds will plant one acre in hills.

### OPEN POLLINATED

**ADAMS EXTRA EARLY, 70 Days**—Is good, very early, table corn, but not a sugar corn. Produces tender ears, 70 days from planting.

**BANTAM EVERGREEN (Golden), 90 Days**—Has all the splendid qualities of both Stowell's Evergreen and Golden Bantam, of which it is a cross. Ears 8 inches long, with 14 to 18 rows of delicious golden kernels.





Country Gentleman

**COUNTRY GENTLEMAN (Shoe Peg), 105 Days**—Late. The ears are good sized (7 to 9 inches long), and the cob is small, densely covered to the very tip with irregular rows of very long, tender, white kernels of delicious flavor when cooked. Stalks average 7 feet in height and frequently yield three ears each.

**EARLY EVERGREEN, 98 Days**—Ears 7 inches long and 2½ inches thick, 14 to 18 rows of sweet delicious white kernels. Matures ten days earlier than Stowell's Evergreen, which it resembles.

**GOLDEN BANTAM 8-ROWED, 80 Days**—The ears are small (about 5 inches) and the grains golden-yellow in color, but the delicious flavor and the tender quality when cooked is not surpassed by any other variety of Sweet Corn, and has made it one of the most popular for the home and market garden. The plants are dwarf, attaining a height of 4 to 5 feet and bearing two or more ears to the stalk.

**GOLDEN BANTAM 12-ROWED, 85 Days**—Can also supply the improved strain, a selection from the old Golden Bantam with larger ear and greater productivity. Desirable for canners and market gardeners.

**GOLDEN COLONEL (Golden Country Gentleman), 95 Days**—Is a cross between Golden Bantam and Country Gentleman with the delightful quality of each variety. Similar to Country Gentleman in stalk, ear and kernel and the Golden Bantam in color. Delicious flavor.

**GOLDEN GIANT, 87 Days**—Is a cross between Golden Bantam and Howling Mob, suitable for both home and market use. Ears are 12 to 16 rowed with golden yellow kernels.

**HOWLING MOB, 85 Days**—So named, the story goes, because when introduced, there was a clamorous demand in the market for this early, tender, delicious sort. Ears measure 7 to 9 inches, with 12 to 14 rows of pearly white grains.

**STOWELL'S EVERGREEN, 100 Days**—More largely planted than any other Sweet Corn, for home use, market, and canning. The long slender grains are of good size. The ears 8 inches long in 93 days. Ears slightly tapered with 16 to 18 rows. Seed white, long, large.

**TRUCKER'S FAVORITE**—Used in the South and West for roasting ears, which are about 9 to 12 inches long. Kernels white.

### HYBRIDS

Hybrid Sweet Corn excels open-pollinated in heavier yield, disease resistance and more even maturity.

**COUNTRY GENTLEMAN HYBRID**—Produces stalks 7½ feet tall with ears 7½ inches long in 98 days. This Hybrid was originated at the University of Illinois and is well adapted to the Middle West and a favorite with the canners.

**GOLDEN CROSS BANTAM**—This splendid corn developed by Purdue, seeds mature some 8 to 10 days later than Golden Bantam. Ears are about 8 inches long, 12 to 14-rowed, stalks 7 feet high, a most popular sort with us.



**IOANA**—This Hybrid comes to us from the Iowa Station; is somewhat similar to Golden Bantam Hybrid with heavier foliage, 8-inch ears, well filled with medium, narrow, light yellow kernels. It is highly resistant to drought and bacterial wilt; superior canning and market variety.

**STOWELL'S EVERGREEN HYBRID**—Grows a sturdy stalk 8 feet high with ears 8 inches long.

## POP CORN

**CULTURE**—The seed should be sown in rows 3 feet apart, about the time beans can be planted. Cover the seed 2 to 3 inches deep with fine soil, and thin the plants to stand 10

to 12 inches apart in the row. The ears should be allowed to dry out very thoroughly, as otherwise the seeds will not pop properly. One ounce will sow 40 feet of row; 4 pounds per acre in hills.

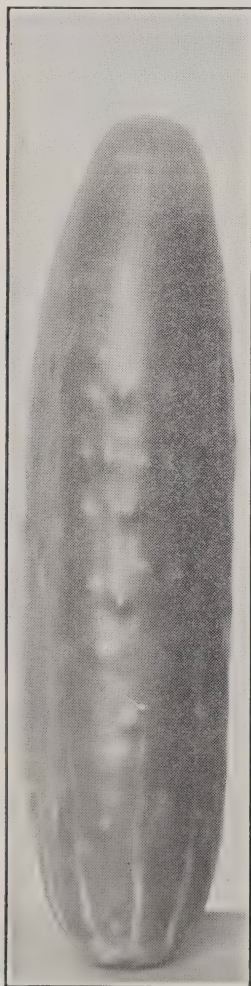
**WHITE RICE**—Bears 3 or 4 small, but attractive ears on a stalk. The pearly white grains are pointed, resembling rice kernels in shape.

**QUEEN'S GOLDEN**—The stalks grow 6 feet tall, with large ears produced in abundance. It pops perfectly white.

**SOUTH AMERICAN**—Giant or Dynamite, is an attractive new golden variety which pops large, beautiful white kernels.

## CUCUMBER

**CULTURE**—Requires warm, rich soil. Plant seed about 1 inch deep in hills 4 feet apart, dropping 8 to 10 seeds in a hill. When plants are up, thin to 3 or 4 to hill. Give them frequent but shallow cultivation, until the runners prevent. Pick the fruit when large enough for use, as vines will cease setting fruit when seeds begin to mature. Two pounds will plant an acre.



Long Green

**A & C (Colorado)**—Popular for shipping, market and home gardens. Fruits are dark green, 2½ by 9 inches, tapering at the ends. A newer and popular variety.

**BOSTON PICKLING or GREEN PROLIFIC, 58 Days**

—The standard pickling variety. The vines yield heavily, and if fruits are picked as soon as large enough, they will continue to bear through long season. The fruits reach a length of 5 to 6 inches and are excellent for slicing, but they are more popular as a pickling variety.

**CHICAGO or WESTERFIELD PICKLING**—Matures in 60 days fruit 6 to 7 inches long, 2¾ inches thick. The fruits of this very desirable sort are of medium length, tapering at each end with large and prominent spines. The color is deep green. This is a very prolific variety and one of the best for those who want crisp, coarsely spined pickles.

**DAVIS' PERFECT**—The fruits measure 9 inches in length, 2½ inches in diameter and mature in 65 days. They are slightly tapering at both ends, with a very rich dark green skin. The fruits are extremely handsome and sell very readily in the markets. The flesh is solid and of superb quality for slicing.

**EARLY CLUSTER**—Matures black-spined fruits, 5½ inches long and 2½ inches thick. Is very early and prolific, bearing fruits in clusters. Fruit is bright green, edible in 52 days. A fine pickler.

**EARLY FORTUNE**—Grows 8 to 9 inches long and 2½ inches thick in 65 days. A fine variety of White Spine type. The fruit is of uniform size and shape and is of very firm texture, thus permitting long-distance shipping. The skin, which is dark green, holds its color remarkably well and therefore remains in slicing condition longer than some of the older standard sorts.

**EARLY SHORT GREEN or EARLY FRAME, 55 Days**—Matures black-spined fruits, 6 inches long and 2½ inches thick in 55 days. Recommended for second crop of pickles and for slicing. Produces short, bright green fruits, both crisp and tender.

**IMPROVED LONG GREEN**—Perhaps the best known and desirable sort for all purposes. Grows well shaped small pickles, and, if allowed to develop to the slicing state, is most attractive. The fruits grow from 10 to 12 inches in length.

**JAPANESE CLIMBING**—A vigorous grower, can be trained on trellis. Fruits 2½ by 8 inches, cylindrical, rounded at both ends. Dark green and smooth. Flesh pure white, crisp and tender.

**LONGFELLOW or VAUGHN**—Is very long long type, maturing at 12 inches with a diameter of 2½ inches, in 70 days. Fruits are dark green, uniform, straight, equally attractive for the home garden or shipping.

**NATIONAL PICKLING**—Largely bred for the pickling factories using small sizes. Makes deep, green, firm, crisp pickles. Matures fruits for seed, 2½ by 6½ inches, in 56 days.

**STAYS GREEN (Black Diamond)**—Is a favorite of cucumber shippers. Has symmetrical fruits, nearly square ends, is 7 to 8 inches long, 2½ inches thick, of very dark green color.

**STRAIGHT EIGHT**—This new variety won the all-American gold medal in 1935. It is a



splendid sort for home and market gardens as well as the commercial trade. Fruits 2 by 8 inches, cylindrical, rounded, blunt ends; color dark green with small seed cavity and medium thick flesh.

**WEST INDIA GHERKIN**—A very prolific, small-fruited variety, used exclusively for pickling. The fruits are 2 to 3 inches in length, thick and rounded, closely covered with spines. It yields abundantly.

**WHITE SPINE IMPROVED (Arlington)**—One of the earliest and very productive. Fruit quite uniform; about 7 inches long and well rounded at both ends; of bright green color. Used for early slicing and when planted late it produces good pickles.

(Note—There are several other Gardener varieties of Cucumber, varying somewhat from kinds described. Can furnish upon application.)

## EGG PLANT

**CULTURE**—The Egg Plant will thrive in any good garden soil. The seeds should be sown in hot-bed or warm greenhouse in March or April, and when about an inch high, potted in 2-inch pots. Plant out about June 1, 2½ feet apart. If no hot-bed is at hand, they can be grown in any light room where the temperature will average 75 degrees. One ounce for 2,000 plants.

**BLACK BEAUTY**—Earlier and nearly as large as New York Purple; fruit very dark purple, which color it holds for a long time.

**NEW YORK IMPROVED PURPLE**—The favorite market variety. Plant large, spreading and spineless, producing four to six large oval fruits of dark purple color.

## ENDIVE

Endive is a delightful salad for fall and winter use. Seed may be sown from the middle of June to the end of August. Frost improves the flavor.

**BROAD LEAVED BATAVIAN**—One of the best varieties for salads; leaves broad, twisted and waved, bright deep green, with a nearly white midrib. Inner leaves form a fair head which blanches a creamy white.

**FULL HEART BAVARIAN**—Improved sort. Plant medium large with well blanching heart of enfolded broad leaves.

**GREEN CURLED WINTER**—The most hardy and vigorous sort; leaves bright, deep green with the outer midribs usually showing a trace of rose; readily blanches a creamy white.

## GOURDS

**CULTURE**—Gourds are tender annuals, and should not be planted until all danger of frost is over, and not less than 6 feet apart each way, in good, rich loam. One ounce will plant 25 hills.

**DIPPER**—Grows in the form of a dipper and thus useful as well as ornamental.

**DISH CLOTH**—The peculiar interior is used as a sponge or dishcloth.

**FANCY VARIETIES MIXED**—A collection of the fancy and ornamental gourds.

**JAPANESE NEST EGG**—Fruit small and creamy white, much resembling a hen's egg.

**SUGAR TROUGH**—Grows to hold from 5 to 10 gallons and makes useful household containers.

## HERBS

### SWEET, POT AND MEDICINAL

**CULTURE**—The seeds should be sown in spring, in shallow drills, 12 inches apart, and the young plants thinned out or transplanted to about 4 inches. They should be harvested on a dry day, just before the blossom develops, dried quickly and bottled, or closely packed in dry boxes, with the air entirely excluded.

**ANISE**—Used for flavoring.

**BALM**—Very fragrant leaves.

**BASIL, SWEET**—Leaves useful for flavoring.

**BORAGE**—Leaves used for flavoring.

**CARAWAY**—Seeds used for flavoring.

**CATNIP**—Leaves used for seasoning.

**CORIANDER**—Seeds used for flavoring.

**DILL**—Used for flavoring pickles.

**FENNEL, FLORENCE**—A bulb-like vegetable formed above ground at base of leaf-stalk.

**FENNEL, SWEET**—Seeds aromatic.

**HOREHOUND**—Very useful for curing coughs.

**LAVENDER**—Leaves very fragrant.

**MARJORAM, SWEET**—Used as a seasoning.

**ROSEMARY**—Leaves very fragrant.

**RUE**—A medicinal plant.

**SAFFRON**—Flowers used for coloring; leaves for flavoring.

**SAGE**—A highly aromatic herb; most useful of all.

**SAVORY, SUMMER**—Leaves for flavoring soups.

**SAVORY, WINTER**—Leaves for seasoning.

**THYME**—Used for seasoning.

**WORMWOOD**—Has medicinal qualities; splendid for poultry.

## KALE OR BORECOLE

**CULTURE**—Belongs to the cabbage family. Makes fine greens. Plant in May or June in the same way as cabbage. One ounce will produce about 2,500 plants.

**DWARF GREEN CURLED**—Is fine curled dwarf sort, with bright green foliage, bears parsley like leaves used for greens and garnishing.

**SIBERIAN or SPROUTS**—Plants reach 12 to 15 inches tall; more spreading. Leaves large with frilled edges, deep green in color.

**TALL GREEN CURLED SCOTCH**—Grows 2 to 3 feet high, bearing curled light green leaves. Is hardy and improved by frost. Much used for greens.



## KOHL RABI

(Turnip-Rooted Cabbage)

**CULTURE**—Combines the flavor of both cabbage and turnip. Sow in rich soil, in rows 18 inches apart and thin to 6 inches apart in the rows. One ounce will sow 300 feet of drill.

**EARLY WHITE VIENNA**—Has small tops, medium white bulbs of choice quality.

**EARLY PURPLE VIENNA**—The bulbs are

purple with white flesh. Valuable for forcing or for outdoor planting.

## LEEK

**CULTURE**—Sow as early in the spring as practicable, in drills 1 inch deep and 1 foot apart. When 6 or 8 inches high, transplant in rows 10 inches apart each way, as deep as possible, that the neck, being covered, may be blanched. One ounce will plant 200 feet of drill.

**LONDON FLAG**—The oldest and best known variety; hardy and productive.

## LETTUCE

**CULTURE**—Lettuce is easily grown, but needs cool weather and plenty of moisture. Sow outdoors as early as the ground is workable in rows 18 inches apart. For winter use, may be sown in hot-beds. Two ounces will sow 150 feet of row; 4 pounds required per acre.

### CABBAGE OR HEADING VARIETIES

**BIG BOSTON (Trocadero), 76 Days**—If enormous size heads, 10 to 12 inches across, with a tightly folded heart of blanched, juicy, buttery leaves are desired, select Big Boston. Is extensively used by gardeners and shippers everywhere.

**DENVER MARKET**—The well known standard crisp head, medium-sized type, bearing light green leaves, very much crumpled. The young heads are pointed but grow more nearly round when mature.

**HANSON, 82 Days**—None more reliable for outdoor cultivation. Heads grow to a remarkable size, resembling that of a flat cabbage. Outer leaves are bright green and beautifully frilled on the edges; inner leaves white and deliciously sweet, tender and crisp.

**ICEBERG, 82 Days**—Fine for home gardens but not so good for shipping on account of its tender head and thin leaves. Grows very large head somewhat crumpled, white inside, very sweet and crisp.

**NEW YORK or WONDERFUL**—This splendid mammoth-heading and long-keeping variety has been grown to weigh six pounds to the head; frequently weighs two to three pounds. Heart is solid, of light green color, very sweet, tender and crisp. Long-standing; perfect heads may be cut from the same bed for many weeks. This lettuce is grown in large quantities on the Pacific Coast and shipped all over the country. It is wrongly called Iceberg by produce dealers, which variety is different and listed above. Can also supply other strains of New York as No. 12, and the different Imperial strains of the New York type for market gardener trade.



Hanson

### CURLED OR LOOSE-LEAVED VARIETIES

**BLACK SEEDED SIMPSON**—A standard variety for forcing and early outdoor culture. It forms large, loose clusters of leaves of light yellowish green color; the leaves are large, thin, very tender, slightly ruffled and blistered; the inner ones nicely blanched, and even the large outside leaves are tender and of good quality.

**EARLY CURLED SIMPSON or SILESIA**—Is widely known and an old-time favorite variety, the most popular loose leaved sort. Heads are a handsome green.

**EARLY PRIZE HEAD**—The plants are medium large, and are composed of many curly leaves. The foliage is bright green, shaded with light brown. This is one of the best home garden varieties, as it grows quickly and makes a lot of good eating leaves which are of remarkably good flavor. It is strictly non-heading and of excellent flavor.

**GRAND RAPIDS**—As a lettuce for home gardens, greenhouse forcing this variety undoubtedly stands at the head of the list, being of quick growth, hardy, little liable to rot and remaining in condition several days after being fit to cut. The plant is upright and forms a loose cluster of large, thin, bright green leaves, savoyed, finely crimped at edges. The



leaves do not wilt quickly after cutting so that the variety will stand shipping long distances.

### ROMAINE TYPES

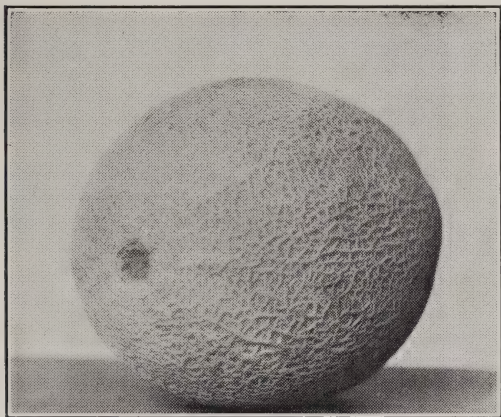
**TRIANON or PARIS WHITE COS**—This variety is the finest of the Cos or blanching sorts. The long, narrow leaves form solid heads, blanch and become snowy white. Excels in quality and crispness. The leaves, when blanched, are stiff like celery, and can be eaten in the same manner.

## MUSKMELON

**CULTURE**—Because of their high sugar content, muskmelons are one of the most delicious vegetables. They require a rich warm sandy loam. Sow 8 to 10 seeds in hills four feet apart each way, enriching the hills with a shovelful of old manure. Plant after the soil is warm, 1 ounce of seed for 50 hills, 3 to 5 pounds to the acre.

### ROCKY FORD CANTALOUPE

**ROCKY FORD or NETTED GEM, 92 Days**—Our strain of this variety is grown for us at Rocky Ford, Colo. Melons are somewhat oval shape, finely netted with light green flesh tinged with golden yellow, ripening close to the rind. Sweet and delicious. Edible in 92 days. Weight, from 1½ to 2½ pounds.



Rocky Ford

**EDEN GEM**—Sometimes called Gold Rined Rocky Ford; has green flesh tinted salmon in the center; splendid quality. Weight, 2½ pounds.

**POLLOCK'S No. 10-25**—Is identical with the ROCKY FORD, except the flesh is salmon tinted in place of green. Its outstanding characteristics are heavy netting, uniformity, earliness and resistance to rust. This is the strain once used in the shipping districts of Colorado and California, now superseded by Hale's Best strains. Edible in 98 days. Weight, 2½ pounds.

**HALE'S BEST, 86 Days**—This is the variety often seen in your grocery store. Fruits are oval, 6½ inches long by 5½ inches in diameter, heavily netted in distinct ribs. Flesh is salmon, very sweet and delicious. The above description refers to the old type of Hale's Best. Different strains of Hale's Best for market purposes have been developed

as Hale's Best No. 36, No. 112, No. 45 or Imperial No. 45, and the Jumbo strain. Reliable stocks of these strains for market growers available.

**HEARTS OF GOLD**—Our strain is larger than the older Hoodo type of Rocky Fords. Fruits are uniform shape and weigh about 3 pounds. It truly has a "Heart of Gold," with delicious flesh of a deep salmon shade. Weight, 3 pounds.

**PERFECTO, 90 Days**—Is recommended as one of the best of the new types of Rocky Fords. One grower says of it: "Fruit very uniform in size, nearly round, and densely covered with a hard gray netting; flesh very thick and of a beautiful salmon color, shading into green as it nears the rind." Recommended for its excellent eating and shipping qualities. Weight, 3 pounds.

### STANDARD SELECTED SORTS

**BANANA**—Long fruits having a banana-like aroma. The fruits are from 15 to 20 inches in length, and from 4 to 6 inches in diameter. The salmon flesh is thick and delicious in flavor. Weight, 7½ pounds.

**BENDER'S SURPRISE**—Is a delicious salmon flesh melon popular in the East. Size, 8 by 7 inches; weighs 6 to 8 pounds, and edible in 94 days. Delicious or Early Bender is similar in character but a week to ten days earlier.

**BURRELL GEM or DEFENDER**—The fruits are 6 to 7 inches long by 4½ to 5 inches in diameter, rather sharply sloping at the ends. Well ribbed and covered with a fine grayish netting. The skin is a rich dark green, contrasting strongly with the deep salmon-pink flesh; sweet and tender. The flesh is thick and firm, ripening close to the skin. Weighs 3 pounds.

**EARLY HACKENSACK**—A large round melon, very early and of high quality. The flesh is green and deep. The rind heavily netted and ribbed. This variety is about ten days earlier than the regular type of Hackensack. Weighs 2¾ pounds.

**EMERALD GEM**—Splendid size, color and flavor (Salmon flesh). This beautiful melon matures in 81 days. It is truly a gem. The ribs are marked, but the skin is smooth, of a deep emerald green color. The flesh is thick and firm, ripening almost to the rind. Weighs 2½ pounds.

**HACKENSACK**—A large type used for home gardens; often weighs 6 pounds; flesh is thick, juicy and sweet, green in color.

**HONEY ROCK (Sugar Rock)**—This new variety, bearing fruits 5 to 6 inches in diameter, coarsely netted, is increasing in popularity with shippers and gardeners. Flesh is of deep salmon color, juicy and of sweet, musky flavor.

**JUMBO**—A large, quality melon weighing 5 to 6 pounds. Desirable sort for home gardens.

**KNIGHT (Maryland)**—Popular with market gardeners as a first early sort. Weighs about 2 pounds with deep green skin changing to golden yellow at maturity and heavily netted.

**OSAGE or MILLER'S CREAM**—A medium to large sized, salmon fleshed melon of excel-



lent quality. The vines are vigorous and productive. The fruits are oval, dark green in color, slightly ribbed and partly covered with shallow gray netting. The flesh is salmon colored, fine grained and highly flavored. Weighs 5 pounds.

**PRIDE OF WISCONSIN**—Is considered a strain of Honey Rock.

**TIP TOP**—So called because of its delightful eating qualities. Produces melons distinctly ribbed, only slightly netted, with pale green skin. Flesh is a deep salmon, sweet and spicy. Size, 7 by 6 inches, weighing 6½ pounds and edible in 96 days. To the Tip Top family strain belong Bender's Surprise, Irondequoit, and Milwaukee Market.

### WINTER MELONS

**HONEY DEW (Green Flesh)**—Honey Dew is a new type of muskmelon, which grows uniform in size, about 6 inches in diameter from top to bottom, and 7 or 8 inches long. The color is a dull white when ripe, having no netting. The rind, though thin, is very tough and so close that the excellent flesh is

practically sealed up where it keeps in fine condition for several weeks after they are ripe. The flesh is a rich green color, very sweet and possesses a delightful flavor. Maturing in 110 days. Weighs 5½ pounds.

**HONEY DEW (Gold Rined)**—Is like the green flesh Honey Dew except the rind is a deep golden yellow, round and shiny.

**GOLDEN BEAUTY CASABA**—Often called Winter Muskmelon. It is extensively grown throughout the Southwest for shipping to our Eastern markets, and sold at very high prices during the fall. Maturing in 110 days. The melons are nearly globular in shape, bright yellow with golden tint and wrinkled skin. Measures 6 to 8 inches in diameter. Flesh is white, thick, and delicious. Weighs 6 pounds.

**HONEY BALL**—A cross between Honey Dew and Cannon Ball is a most delicious new variety. Is round and well netted with greenish flesh and small seed cavity. While very sweet, it retains the spiciness of the cantaloupe. Bound to be a popular sort. Weighs 3 pounds.

## WATERMELON

**CULTURE**—To cultivate good watermelons, plant in hills about 6 feet apart each way, and incorporate well-rotted manure thoroughly with the soil. Plant 8 to 10 seeds in a hill, when ground is dry and warm. When the plants are well up, thin out to 3 or 4 of the strongest plants in the hill. Sow 1 ounce to 25 hills; 5 pounds to the acre. Our seed is much superior to the ordinary stock offered.

**ALABAMA SWEET**—Produces large dark green melons netted with light green stripes. Flesh sweet. A good shipper. Average weight 30 pounds. Edible in 90 days.

**CITRON (Green Seeded)**—Citrons are used only for preserving. Flesh is white and the seeds are a smooth shiny green. Outside color is light green with heavy dark green stripes.

**COLE'S EARLY or HARRIS EARLY**—Its value lies in its earliness. Size, 10½ by 8½ inches, and weighs 20 pounds; edible in 80 days. A home garden sort.

**CUBAN QUEEN**—One of the older popular varieties and still much used. Is a round, slightly oblong melon, with green stripes, 30 pounds in weight, maturing in 90 days. A fine shipping melon.

**DIXIE QUEEN**—A new sort, weighing 40 to 50 pounds, maturing in 82 to 85 days. Fruits nearly round, light green in color, striped with darker green, rind is thin but tough, making a good shipper. The deep red flesh is delicious, seeds are white.

**EXCEL**—A large dark green melon with slightly mottled stripe. Flesh is a deep red when ripe and of splendid quality. Size, 23 by 10 inches, weighs 48 pounds, edible in 95 days.



Tom Watson



**FLORIDA FAVORITE** — Popular in the South, being a splendid melon of large size and excellent quality. Rind is a mottled green. Matures in 87 days.

**FLORIDA GIANT (Black Diamond, Cannon Ball)**—One of the best of the new melons, is vigorous and productive, matures fruits weighing 40 to 50 pounds in 90 to 95 days with a tough, hard rind. The flesh is bright red with a firm texture and excellent quality. Seeds large mottled, dark brown.

**GOLDEN HONEY**—The best of the yellow fleshed melons, size 12 by 11 inches and weighing 20 pounds; edible in 90 days. Flesh is a sparkling golden color and quite delicious.

**IRISH GRAY or HAWKESBURY** — Our old Irish Grey strain is superseded by the new wilt-resistant Hawkesbury, producing large, oblong melons about 18 inches long and 8 to 10 inches in diameter. Color, light gray with veins of deep green. The flesh is a deep pink and of excellent quality. Although the rind is thin it is tough and therefore a good shipper. Seeds brownish black; weighs 35 pounds.

**GYPSY or GEORGIA RATTLESNAKE**—Our improved strain gives you a long, good sized melon, mottled dark green rind, with deep scarlet flesh, which is sweet and delicious. A good shipper. Matures in 80 days. Size, 21½ by 9 inches; weighs 30 pounds.

**KANSAS or RED RUSSIAN** — Weighs about 30 pounds with a light green thin rind and bright, dark green irregular stripes. Flesh deep red with fine stripes; delightful flavor. New popular melon in the Midwest for shipping and home gardens.

**KLECKLEY'S SWEET or HALBERT HONEY**—We prefer the improved Kleckley's Sweet strain as superior to the old type of both Kleckley's Sweet and Halbert Honey. The size of this melon is 24 by 12 inches, often weighs 40 pounds and is edible in 88 days. The melon, cylindrical, is very dark green with ridges running lengthwise. The rind is hard, carries well for some distance. The flesh is bright, rich red, crisp and very sweet, seeds white.

**STONE MOUNTAIN or DIXIE BELL**—A new, valuable melon for both the home and market garden. Bears very large almost round fruits with blocky ends; is dark green with indistinct veins and a hard tough rind. The flesh is bright red, crisp, sweet and delicious. Seeds white with brown tips, weighs 40 to 50 pounds.

**SWEETHEART**—Another old standby, and hard to beat. Oblong in shape, has a tough rind and makes a good shipper. Seeds are black. Flesh red, firm, melting and sweet. Weighs 22 pounds, and edible in 88 days.

**TOM WATSON**—This melon is an old favorite both among shippers and gardeners. Its size is 22 by 12 inches, weighs 35 pounds and edible in 92 days. The rind is very tough, making it an excellent shipper. Flesh deep red, crisp and sweet. Seeds are brown, almost white.

**WILL ROGERS**—This new melon of the Stone Mountain type is 14 by 12 inches in size, weighs 35 pounds, and is edible in 88 days. The seeds are white tipped with black.

It is bright red fleshed of good eating quality, which makes it popular in the Southwest.

## MUSTARD

**CULTURE**—Plant in rows 12 to 18 inches apart; 1 ounce plants 100 feet of rows.

**CHINESE SMOOTH LEAVED (Elephant's Ear, Large Smooth Leaf)**—Has large, deep green, smooth leaves 9 to 10 inches long and 6 inches wide, of mild and pungent flavor, seed is a reddish brown.

**FLORIDA BROADLEAVED** — Leaves are large and thick, bright green, smooth, with toothed edges with whitish midrib, seeds reddish brown.

**OSTRICH PLUME or FORDHOOK**—Leaves are curled much like an ostrich plume, hence its name. Delicious for salads and fine for greens.

**SOUTHERN GIANT CURLED**—Plant vigorous and hardy, of upright, spreading growth; leaves large, light green, tinged yellow, much crumpled and frilled at the edges. The popular market variety in the South; seed small, dark reddish-brown.

**TENDER GREEN or MUSTARD SPINACH (Komatsuma)** — A valuable addition for greens. Grows rapidly narrow, spoon-shaped leaves of dark color.

## ONION SEED



Red Wethersfield

**CULTURE**—Onions thrive in rich, loamy soil and are quite hardy. Plant as soon as the soil can be worked. Use ¼-pound of seed per 100 yards of row and 5 pounds to the acre.

**CRYSTAL WHITE WAX, 90 Days**—Is a large white flat onion. Popular in Texas and other southern states. Matures a fine, mild, sweet onion. Fine for market or home gardens.

**EBENESER (Japanese)**—Used mainly in the production of Yellow Onion sets. Bulbs medium size, skin dark yellow, flesh creamy yellow, matures 100 days.

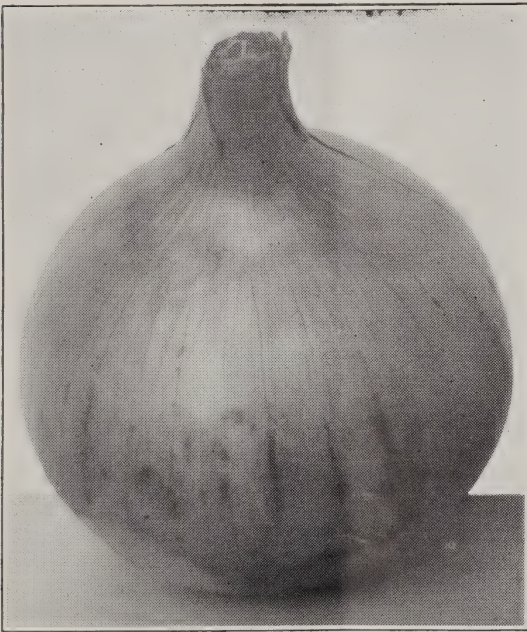


**PRIZETAKER (Denia), 105 Days**—Is the most widely used of the sweet Spanish class, extensively grown for shipping and very productive. The bulbs are large, globular, glossy and of a light shade of yellow. Flesh is mild and sweet.

**LARGE RED WETHERSFIELD**—Is the favorite red sort in many sections. Produces deep, rich, glossy purplish red bulbs, well flattened, yet thick through, with mild white flesh, tinged with pinkish rose. Specimens grow to a large size in about 100 days and keep well.

**SOUTHPORT RED GLOBE, 110 Days**—In this Southport Onion, we have a medium, large sized, globe shaped, purplish red bulb, with smooth, rich, glossy surface and a small neck. Its flesh is white, tinged with purple, tender and mild.

**SOUTHPORT WHITE GLOBE, 110 Days**—To those who prefer a white onion, either for their market demands or because of a preference for the white sorts, when cooked, this sort is a prime favorite. It yields abundant crops of handsome, globe shaped, white bulbs, having a firm, mild, fine grained flesh.



Onion—Prizetaker

**SOUTHPORT YELLOW GLOBE, 115 Days**—Again, we have in this yellow sort, the many excellent qualities of the Red Southport, except that the bulbs are a straw colored, rich yellow. Flesh is a creamy white, if anything, a little milder than the Red variety.

**SWEET SPANISH WHITE**—Largest of the White varieties with clear, white skin, bulbs globular with small neck, white flesh, matures in 110 days, very attractive and a medium good keeper.

**SWEET SPANISH YELLOW**—This popular large Yellow variety is of Spanish origin,

much like the Prizetaker but larger. Its medium dark flesh is thick and creamy white, mild and juicy, desirable both for shipping and fall storage as well as home use.

**WHITE BERMUDA (Yellow Bermuda) 88 Days**—This variety is not pure white but light straw colored. In the South this onion has widespread popularity. Is easy of cultivation, large sized and of mild flavor.

**WHITE PORTUGAL or AMERICAN SILVERSKIN, 100 Days**—Is a medium sized onion of mild flavor and with beautiful, clear, white skin. The variety is a favorite with many for use when young as a salad or bunching onion and for pickling. It usually matures about ten days earlier than White Globe and is fine for fall and early winter use. The bulbs are nearly round when of bunching size, somewhat flattened when mature.

**YELLOW GLOBE DANVERS**—The standard variety for winter use in the eastern markets. It produces well-ripened bulbs, averaging 2 inches in diameter and nearly globe-shaped. The skin is a light golden brown or pale yellow, and the flesh is pure white, crisp, and mild in flavor. The plants have very slender necks, and consequently the bulbs keep well over winter. It is an enormous yielder, a crop of 600 to 800 bushels to the acre being not unusual.

Other strains of Yellow Globe Danvers with varying characteristics as Brigham Yellow Globe, Ohio and Michigan Yellow Globe and Mountain Danvers, are available to the gardener and shipping trade.

## OKRA or GUMBO

**CULTURE**—Sow in May or June, after the ground is warm, in drills three feet apart, cover the seed with about 1 inch of soil and thin to 12 or 18 inches apart in the row. Use 1 ounce of seed to 50 feet of row; 8 pounds to an acre.

**DWARF LONG POD GREEN**—Grows dark green pods 8 inches long and 1½ inches in diameter, fleshy and tender.

**PERKINS' MAMMOTH LONG POD**—A dwarf-growing very early and prolific variety. Pods are long, slender, deep green and of fine quality. Pods are ¾ by 1½ inches; plants are 3¼ to 4½ feet tall. Pods are ⅞- inch.

**CLEMSON SPINELESS**—Is the same general description of Perkins, somewhat improved and entirely spineless.

**WHITE VELVET**—A valuable variety characterized by round, smooth pods, free from ridges and seams. It is the most prolific Okra now offered, bearing 16 to 20 remarkably white pods per stalk. Dried in the shade, the pods can be used for soups at any time. Pods are 6 by 1½ inches, plants 3½ to 4½ feet tall.

## PARSNIPS

**CULTURE**—Sow as early in the spring as the weather will permit, in drills 15 inches apart, covering half an inch deep. When well up, thin out to 5 or 6 inches apart in the rows. Unlike carrots, they are improved by frost,



and it is usual to take up in fall a certain quantity for winter use, leaving the rest in the ground till spring, to be dug as required. One ounce for 200 feet of drill; 5 to 6 pounds in drills for an acre.

**HOLLOW CROWN**—An excellent variety for the table. The roots are long, with smooth skin, uniform in shape, tender and of the best quality. The variety is easily distinguished by the leaves growing from the depression on top of crown of the root.

## PARSLEY

**CULTURE**—The leaves of Parsley are used for garnishing and flavoring. Seed resembles that of celery, but larger and dark grayish green. After soaking for a few hours in tepid

water, to hasten germination, sow in rich, mellow soil, in drills 1 foot apart and  $\frac{1}{2}$  inch deep. Thin out the young plants to 4 inches apart. Give Hamburg Parsley the same culture as Carrots. One ounce will sow about 150 feet of drill.

**CHAMPION MOSS CURLED**—A vigorous, compact sort, very fine for garnishing and flavoring. Owing to its uniformly deep green color and attractive foliage, it is one of the best for either market or home use. Densely crimped and curled.

**HAMBURG or TURNIP-ROOTED**—The fleshy roots of this variety resemble parsnips, and are used in soups and stews. The flesh is white and somewhat similar to celeriac (root celery). The roots may be dug and carried through the winter, like turnips.

## PEAS

**CULTURE**—Sow in earliest spring and make successional plantings every ten days until June 1. Drill 1 to 2 inches deep in rows  $2\frac{1}{2}$  to 4 feet apart. In the field use no sticks. In garden culture sow in double rows 10 inches apart, use supports for the tall growing varieties. A packet will sow about 20 feet of drill; a pound to 100 feet; 90 to 120 pounds per acre.



Gradus, or Prosperity

**ALASKA, "Earliest of All," 55 Days**—The vines grow  $2\frac{1}{2}$  feet tall, bearing well-filled, medium sized pods  $\frac{1}{2}$  inch wide, 3 inches long, pale green, plump and blunt, containing 6 to 8 round bluish-green peas uniform in appearance. Valuable canners' sort and fine for home gardens.

**ALDERMAN or DARK PODDED TELEPHONE, 74 Days**—A late wrinkled variety growing 4 to 5 feet high and bearing freely large pods of a dark green color and on this account considered by many superior to the old Telephone. Quality extra fine.

**AMERICAN WONDER or NOTT'S EXCELSIOR, 60 Days**—The improved strains of

these old popular sorts are too much alike to list separately. In fact, our strain is much superior to most small dwarf wrinkled sorts sold under either name. Vines are 16 inches high, producing medium green pods, 3 inches long and  $\frac{1}{2}$  inch wide, plump, straight and blunt-ended. Pods are always well filled with sweet, delicious peas.

**CHAMPION OF ENGLAND, 76 Days**—The strong-growing and much branched vines measure 4 to 5 feet tall and they bear an immense crop of fine pods. The pods are borne in pairs and measure  $3\frac{1}{2}$  to 4 inches long. They are crowded to capacity with six large peas. Very sweet.

**DWARF TELEPHONE**—Resembles the Tall Telephone except the growth is only about 2 feet tall. Seeds are green, large, wrinkled. Matures in 75 to 80 days.

**EVERBEARING, 72 Days**—Grows from 2 to  $2\frac{1}{2}$  feet high, of branching habit, pods from 3 to 4 inches long, containing from 6 to 8 of the very largest peas, of particularly rich flavor. Unsurpassed in quality and very productive, continuing a long time in bearing.

**FIRST AND BEST (Pedigreed Extra Early)**—This is the earliest and most even strain of first early white peas. The vines are vigorous and hardy, of medium height, about  $2\frac{1}{2}$  to 3 feet, bearing 3 to 7 straight pods of good size, about  $2\frac{1}{2}$  to  $2\frac{3}{4}$  inches long, each containing five to seven medium sized, smooth peas of fair quality. Seed small, smooth, yellowish white.

**GRADUS**—Ours is an improved strain of the old-fashioned Gradus or Prosperity. The vines are 3 feet tall, with pods about 4 inches long, filled with 6 to 8 large, sweet and tender peas. Seeds are large and wrinkled. Is ready for the table in 55 to 60 days after planting.

**LARGE WHITE MARROWFAT**—One of the oldest varieties in cultivation and a favorite market sort. Pods large, well filled and of excellent quality.

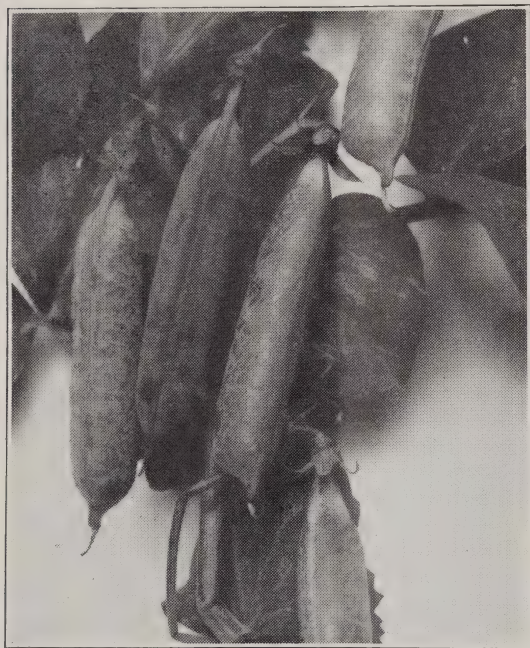
**LAXTONIAN (Blue Bantam, Hundred-fold), 60 Days**—This handsome wrinkled pea is the largest podded of the dwarf varieties. The dark green pods are similar to Gradus in shape and splendid quality, are nearly as large in size and often mature a little earlier.



Vines vigorous and productive, averaging 18 to 20 inches high; foliage dark green; pods about 4 inches in length. Seed light green, large, wrinkled, flattened, irregular in shape.

**LAXTON'S PROGRESS, 60 Days**—Is another selection of the Laxtonian type, bearing a little larger pods than the Laxtonian. The vines grow to a height of 18 inches and usually mature about 4 days earlier than the Laxtonian. Pods are 5 inches long, dark green in color, containing 7 to 10 delicious peas.

**LITTLE MARVEL, 63 Days**—An excellent dwarf sort for the market and home garden. The pods average a little longer than those of Premium Gem, are more attractive in shape and color and the peas are of superior quality. The vines are heavily set with large, straight, deep green pods which are square ended and are well filled with 7 large tender peas. Peas dark green, wrinkled and very prolific. Vines grow 18 to 20 inches tall. Pods dark green, 3 inches long and ½ inch wide, quality delicious.



Peas—American Wonder

**PREMIUM GEM, 62 Days**—A dwarf, wrinkled, extra early variety, growing about 20 inches high, and is one of the earliest of the good quality varieties for home gardens. This is an older variety that certainly deserves its great popularity.

**STRATAGEM or POTLATCH**—Grows about 2½ feet tall, with large pods, much like the Telephone type. Matures in about 80 days. It is a splendid late variety.

**THOMAS LAXTON, 60 Days**—Vines 3½ feet tall; pods dark green, 3½ inches long by ¾-inch wide; plump and blunt. Seeds are large, wrinkled, cream and green. Unsurpassed for home and market garden.

**WORLD'S RECORD, 55 Days**—Belongs to the Gradus. Thomas Laxton family and usually a little earlier with shorter vines

which are some 3 feet high. Pods are plump, 3½ inches long, seeds large, cream and green, wrinkled and fine quality.

## EDIBLE POD

**DWARF GRAY SUGAR**—Good edible pod type, grows 3 feet tall with abundance of pods 2¼ to 3 inches long, good flavor.

**MELTING SUGAR**—Large edible podded. A great favorite, white seeded sugar pea, with those who have once used them. Plants grow 5 feet high, producing handsome large pods in 70 days, which when cooked resemble wax beans; tender and delicious.

## PEPPER



Peppers—Assorted Five Varieties

**CULTURE**—Sow seed early in hot-bed, or about middle of spring, in open seed bed, the soil being light and warm. When 3 inches high transplant in rows about 2½ feet apart and 2 feet apart in the rows. Cultivate and keep free from weeds. One ounce will produce 1,500 plants.

**ANAHEIM CHILI**—Fruits are 6 to 8 inches long and about 1 inch through, tapered and become dark green before turning to a ripe scarlet. While this is a hot variety, they are mildly pungent.

**CALIFORNIA WONDER (Hot), 72 Days**—Fruits are 4 inches in diameter and 4 to 4½ inches long, blocky, 4-lobed, deep green, becoming a bright crimson; flesh is firm and sweet.

**CHINESE GIANT, 80 Days**—Not only most productive, but matures very early. Before the fruits ripen they are rich dark green, turning to a brilliant scarlet-red when they reach maturity. The fruits are 4 to 5 inches broad and fully as long. The flesh is the thickest ever found in any of the large size peppers, being strictly mild and sweet.

**HUNGARIAN YELLOW WAX (Hot), 60 Days**—Fruits are 7 inches long and 2 inches thick, tapered, color waxy yellow turning bright red, is all-purpose pepper for home and market purposes, also a good canner.

**LARGE BELL or BULL NOSE (Hot) 55 Days**—Sometimes called Sweet Mountain. The plants are vigorous, about 2 feet high, compact and very productive, ripening their crop uniformly and early. The fruits are large, with thick, mild flesh of excellent quality. The color is deep green when fruit is young, bright crimson when ripe. Fruits are 3 inches in diameter, 4 inches long.

**LONG RED CAYENNE (Hot), 70 Days**—The conical shaped fruits are 3 to 4 inches





**Basket Victory Vegetables**

long, of bright red color, and borne in great profusion. The flesh is very hot. A favorite for bunching with pot herbs or for winter use. Matures in 70 days.

**OZARK GIANT**—A large heavy yielding sort, 4½ inches long, 4½ inches in diameter, producing in 80 days. Is 4-lobed. Popular in the South for market purposes.

**PIMIENTO (Sunnybrook)** — Fruits are heart-shaped, 3 inches long, deep green becoming red. Sweet and of fine flavor.

**RED CHILI**—Pods are small and hot. Plants grow 18 inches high, fruit usually

erect, about 2 inches long, cone shaped, bright red and very hot; exceedingly prolific. Matures in about 90 days. Used for pepper sauce or pickling or dried for winter use.

**RUBY GIANT (World Beater) (Hot), 70 Days**—A good shipper. Fruits oblong, large, 5 inches long, 3½ inches through; dark green becoming a bright red.

**RUBY KING, 65 Days**—The peppers are of a bright ruby red color, from 4½ to 6 inches long, by 3½ to 4 inches in diameter. Flavor mild, and can be sliced and eaten with salt and vinegar like tomatoes.

## PUMPKIN



**Small Sugar**

**CULTURE**—Sow in the month of May, when you plant your corn. Make hills, same as you do for squashes, but about 8 to 10 feet apart each way. It is preferable to grow Pumpkins in the field, and not in the garden, as they always mix with the squashes and other vines. You can sow some among your late corn, putting in a few seeds, say every third or fourth hill. This will give you plenty for the table, and your stock the coming winter. One ounce of seed will plant 15 hills; 3 to 4 pounds will plant an acre.

**CONNECTICUT FIELD**—Also known as Big Tom. A large, round or slightly oval shape pumpkin. Skin reddish orange color, with rich orange yellow flesh. Extensively grown for stock feeding, and generally planted with corn, producing enormous crops in 65 days. One of the best grown for pies. Fruits weigh about 20 pounds.

**JAPANESE PIE**—An extremely early variety of large size, crooknecked. Skin is dark green, striped with still darker green, with yellow flesh. Keeps well and is popular as a pie pumpkin. Weighs 12 pounds.



**KING OF THE MAMMOTH, 85 Days**—This is a giant among pumpkins, often reaching a weight of 60 to 80 pounds. The skin is salmon colored, flesh bright yellow and fine grained and good quality.

**LARGE CHEESE or KENTUCKY FIELD, 80 Days**—Fruits large, round and flattened, creamy buff in color; flesh yellow, very deep and fine quality for canning and pies. Weighs 15 pounds.

**STRIPED CUSHAW**—Of the crookneck type, with mottled green and white stripes; fruit weighs up to 15 pounds; flesh yellow, very solid and fine grained.

**SMALL SUGAR (New England Pie), 75 Days**—A rather small variety; one of the very best for pies and growing in the home garden. Fruits round, flattened at the ends and slightly ribbed; both skin and flesh of deep orange-yellow color; the flesh is exceedingly thick and of high quality. Weight, 6 to 8 pounds.

**TENNESSEE SWEET POTATO**—Fruits are pear-shaped, 14 inches long and 10 inches in diameter, maturing in 110 days; weight, 12 to 15 pounds. Skin is creamy white with

light green stripes, flesh is yellow with a delightful sweet potato flavor.

**WHITE CUSHAW (Jonathan)**—Bears fruit from 2 to 4 feet long, with crookneck. Shell is hard, a creamy white, with solid yellow flesh. A very fine selection.

## RADISH

**CULTURE**—Sow seed as early in spring as the ground can be worked,  $\frac{1}{2}$  inch deep, in rows 12 to 18 inches apart. Seed should be sown thinly, and if plants come up closer than 1 inch, they must be thinned out. Sow at intervals for succession until about the middle of May when the long sorts should be sown; about July 1, the winter varieties. One ounce will sow 100 feet of drill; 8 to 10 pounds per acre.

## ROUND VARIETIES

**CRIMSON GIANT, 30 Days**—This variety grows twice the size of the other round sorts, 1 to  $1\frac{1}{2}$  inches in diameter. The flesh is crisp and mild, as of the smaller sorts. Remains edible a long time.

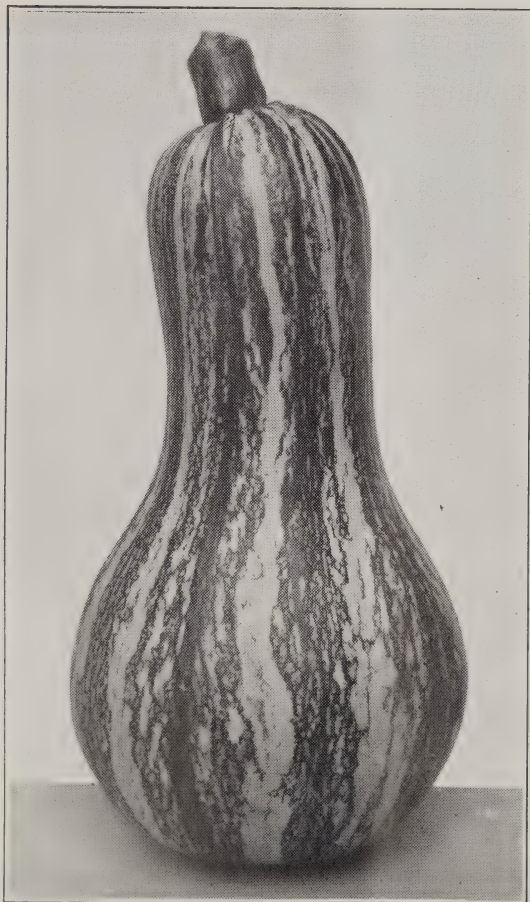
**EARLY SCARLET TURNIP**—An old sort, well known, round, crisp and brittle. The skin is of a rich, scarlet color, while the flesh is pure white, and always tender, mild and sweet. It has a small, short top, and is well adapted to open air culture or to forcing under glass. In favorable weather and in good soil it will mature in 25 days from the sowing of the seed. It is extensively used by market gardeners.

**EARLY SCARLET GLOBE, 28 Days**—The roots of this variety are slightly olive-shaped, a rich bright scarlet in color; flesh white and tender. We especially recommend this to gardeners as a large, first early forcing radish. It is also very desirable for first early planting outdoors.

**FRENCH BREAKFAST, 25 Days**—French Breakfast is a beautiful radish of true oblong or olive shape. The color of the skin is bright carmine, shading to clear white in the lower portion. The flesh is white, firm, and crisp; juicy, mildly pungent, and tender. It is well adapted for forcing in the greenhouse and hot-bed. Matures quickly outdoors.

**SCARLET TURNIP WHITE TIPPED, 25 Days**—The upper part of the radish is a crimson red and the lower part a snowy white. They not only make an attractive appearance bunched but are as good as they look.

**SPARKLER WHITE TIPPED, 28 Days**—Much the same as the Scarlet Turnip White Tipped except that the white area is more pronounced. Tops are small and the roots almost globe-shaped, with bright scarlet color and a pronounced white tip. The quality is excellent and is recommended for both home and market garden.



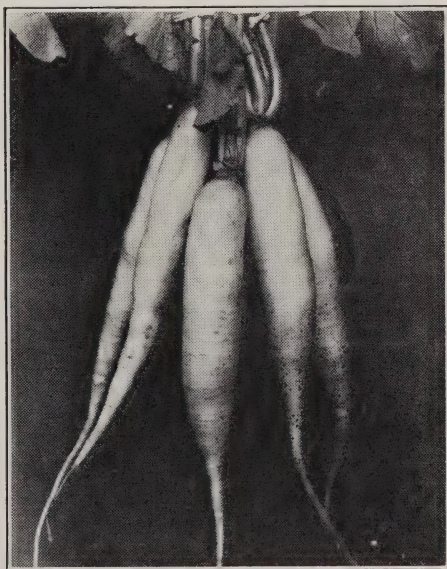
Pumpkin—Striped Cushaw





French Breakfast Radishes

## LONG RADISHES



Iceicle Radishes

**ICICLE, 30 Days**—Grows more popular every year. It can be used as a summer radish or forced in frames. The roots are 4 to 5 inches long and  $\frac{1}{2}$  to  $\frac{3}{4}$  inch in diam-

eter. They mature earlier than any of the other white radishes, and are very attractive, being pure white, almost transparent, and very tender.

**LONG SCARLET, SHORT TOP (Cincinnati Market)**—This is a standard, most excellent sort, either for the home garden or market. Tops short and comparatively small. Roots smooth, slender, uniform in shape and a very attractive bright red in color. It matures beautiful radishes, which are always brittle and sweet, in 25 days from the sowing of the seed. It is undoubtedly the standard long red variety that will withstand the hot dry weather and remain firm and crisp and of fine flavor.

**WHITE STRASBURG**—A white radish, of large size, often growing 4 to 5 inches in severe heat. This variety keeps continuously crisp and tender for a long time. The home and market gardeners' favorite summer radish. Ready to use in about 45 days.

## FALL OR WINTER RADISHES

**CHINA ROSE (Scarlet China), 50 Days**—Sown in the fall, the seed will produce 5-inch roots of deep rose-color which will keep well into the winter. The pure white flesh is very firm, compact, and pleasingly pungent.

**LONG BLACK SPANISH, 55 Days**—Grows 7 to 8 inches long, 2 to 2 $\frac{1}{4}$  inches through at top; skin black; flesh white and firm.



**ROUND BLACK SPANISH**—Similar to Long Black Spanish, but is round in shape.

**WHITE CHINESE or CELESTIAL, 55 Days**—An outstanding variety, growing to enormous size. The roots are cylindrical and grow 8 to 10 inches long with a diameter of 4 inches. The flesh is crisp, juicy, and tender. Agreeably mild in flavor. The roots are easily stored in boxes packed in sand and will keep all winter long. This is the most widely grown of all winter radishes.

## RHUBARB or PIE PLANT

**CULTURE**—Sow seeds in rows an inch deep and thin the plants to 6 inches apart. Transplant the plants 3 or 4 feet apart in the fall where they are to remain. Stalks should not be cut until the second season. One ounce will produce 1,000 plants.

**VICTORIA**—Produces thick red stalks.

## SALSIFY (Vegetable Oyster)

**CULTURE**—Sow the seed early in spring, in drills 12 inches apart and 1 inch deep, thinning out the young plants to 6 inches. The roots will be ready in October, when a supply should be taken up and stored. Those remaining will suffer no injury by being left in the ground until spring. One ounce will sow about 50 feet of drill.

**MAMMOTH SANDWICH ISLAND**—Tender and delicious. Superior to all other sorts.

## SPINACH



**Bloomsdale Savoy Leaved**

**CULTURE**—Spinach demands rich, light soil. Sow seed in early spring, 1 inch deep, in rows 12 inches apart, and make additional sowings every two weeks for a succession. For fall use, sow in August, and for a winter

crop, in September. One ounce will sow about 100 feet of rows; 10 to 12 pounds in drills to the acre.

**BLOOMSDALE LONG STANDING (Round Seeded), 45 Days**—Small but very compact, with short-stemmed, dark green leaves. The leaves are pointed, of thick texture, and much crumpled. Stands a long time before bolting to seed. Yields over 1,000 bushels per acre on good soil.

**BLOOMSDALE SAVOY (Round Seeded), 40 Days**—The most largely grown variety and suitable for the home and market garden. One of the earliest and best for fall planting, for spring use being very hardy, but goes to seed quickly in hot weather; leaves broad, dark green and much crumpled.

**GIANT THICK LEAVED (Round Seeded), (Nobel)**—Is the best of the round-seeded, thick-leaved group. Is an enormous yielder of a deep green color and smooth character leaves. Valuable for home and market garden as well as canning.

**KING OF DENMARK, 48 Days**—Round seeded, excellent canning, market and home garden variety. Large spreading plants with broad, rounded, dark green leaves somewhat crumpled.

**NEW ZEALAND, 55 Days**—Entirely different from other Spinach in type and in that it thrives during hot weather and in any soil, rich or poor. The tender shoots are of good quality and may be cut throughout the summer. Plant three or four seeds in hills two feet apart each way. This Spinach can be used in August or September or up till frost. By using only the leaves it will sprout out again.

## SQUASH

**CULTURE**—Plant in warm ground after danger of frost is past. Summer varieties should be planted in hills 4 to 5 feet apart each way, and winter kinds 8 to 12. Sow 8 seeds to the hill and thin to four plants when they begin to vine. One ounce will plant 25 hills; 3 to 4 pounds to the acre.

### SUMMER VARIETIES

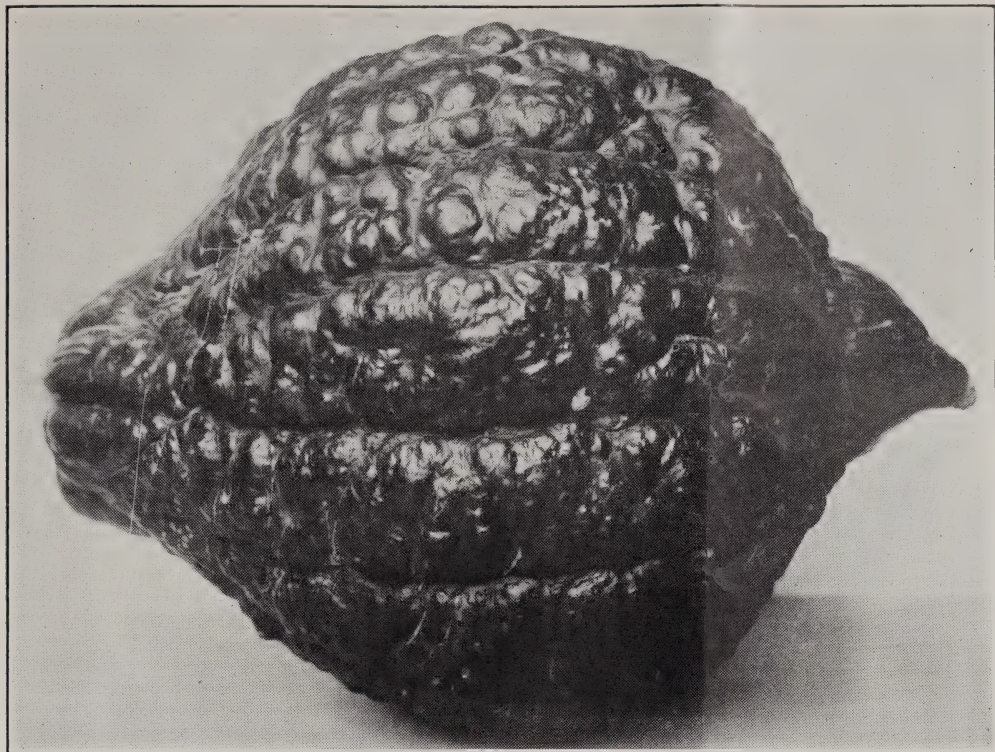
**COCOZELLE (Italian Marrow), 65 Days**—Fruits are straight, nearly cylindrical, 18 inches long and 5 inches in diameter, color dark green, light green with yellow stripes; suitable home market and shipping purposes.

**FORDHOOK, 62 Days**—While a summer sort, if stored in a warm dry place, keeps well. Outside color is bright yellow; inside, straw yellow. Splendid for baking or pies, as the flesh is dry and sweet; 8 inches long, 3 inches in diameter.

**GIANT SUMMER CROOKNECK, 50 Days**—Is much larger than the Yellow Summer Crookneck. Fruit grows from 9 to 12 inches long and 3½ inches in diameter.

**GIANT SUMMER STRAIGHTNECK, 60 Days**—Good market sort as packs to advantage, is 18 inches long and 4½ inches in diam-





Warty Hubbard

eter. Fruit is warted, lemon yellow, flesh light yellow.

**GOLDEN SUMMER CROOKNECK**—Crop matures in about 60 days. Fruits are 8 to 10 inches long and 2½ to 3 inches in diameter, pear shaped with curved neck and heavily warted, with medium yellow color, becoming orange-yellow when mature.

**MAMMOTH WHITE BUSH SCALLOP**—Fruit from our strain measures 9 to 11 inches in diameter, of creamy white color and fine for table use or market.

**WHITE BUSH SCALLOP (Patty Pan), 50 Days**—An old favorite sweet with pale green fruits when young, becoming white as they mature; is somewhat pie-shaped with scalloped edges, 3 inches long, 7½ inches in diameter.

**YELLOW BUSH SCALLOP, 54 Days**—Is similar to the White Bush, except in color, being a golden yellow. Is of the Patty Pan type, sometimes called Golden Custard.

### AUTUMN AND WINTER SORTS

**BANANA, 105 Days**—Fruits cylindrical, 24 inches long and 6 inches through, color light gray, flesh fine grained, yellow-orange, of delicious flavor.

**BANANA PINK**—Much the same description but colored deep pink.

**DELICIOUS**—Produces dark green fruit of medium size, weighing 5 to 10 pounds. Flesh is fine grained, of superb quality, tasty and a

good keeper. To many, DELICIOUS is the finest flavored of all the winter squashes.

**DELICIOUS GOLDEN**—Same as Green Delicious except the deep orange color of its skin.

**TABLE QUEEN (Des Moines, Acorn), 58 Days**—Very prolific and popular for all market purposes. Fruits pointed acorn shaped 5½ inches long, 4 inches through and dark green, flesh is light yellow.

**BLUE HUBBARD, 110 Days**—Much the same as the original type of improved Hubbard except its bluish gray shell.

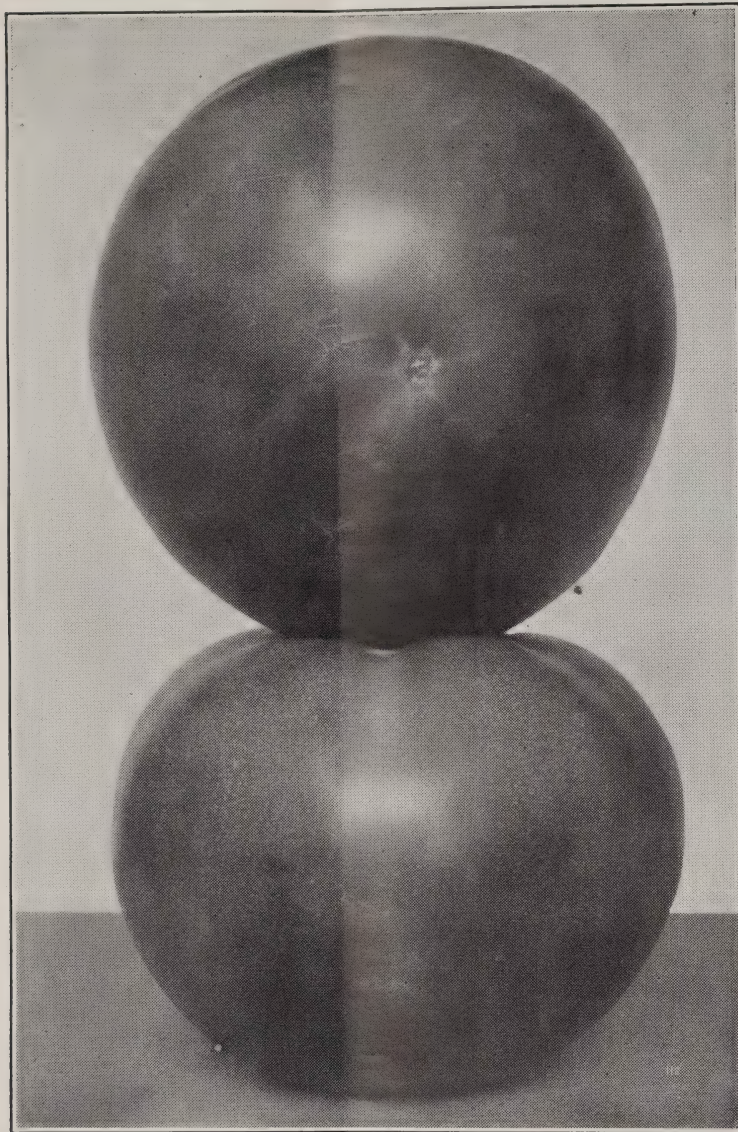
**GOLDEN or RED HUBBARD**—We think this strain is more prolific and earlier than the regular HUBBARD. Has glossy warted orange-yellow skin, which turns to a salmon red at maturity. Fruits weigh 10 to 12 pounds, and keep well. Canners prefer this sort. Flesh is deep golden yellow. Vines often ripen 5 to 6 of these large fruits.

**HUBBARD IMPROVED (Green Hubbard)**—Our strain is superior. Fruits are pointed at both ends, being somewhat warted, large, with dark bronze green skin. Flesh is orange-yellow, dry sweet and thick. A splendid keeper and of top-notch quality, weighing 10 to 12 pounds.

**WARTY HUBBARD**—Or the same type as the regular Hubbard but the shell is more heavily warted and is slightly larger than the true Hubbard. Weighs 14 pounds. Our strain is an improvement of the old Warty Hubbard.



## TOMATOES



**Dwarf Champion or Tree Tomatoes**

**DWARF CHAMPION or TREE (Kansas Standard)**—Forms a small tree, producing many good sized, uniform, glossy, purplish red fruits, having solid flesh with a meaty center. Is a second early or main crop and popular in the West.

**EARLIANA**—Has been styled, "First on the Market." Since its introduction, has become one of the most widely favored varieties. Is one of the earliest of the red tomatoes, setting forth freely its uniform, fleshy, smooth fruit, weighing  $4\frac{1}{2}$  to  $5\frac{1}{2}$  ounces.

**GLOBE, 75 Days**—Is of a beautiful globe-shape. Among the very first to ripen, although of large size, very smooth, firm-fleshed, few seeds, ripens evenly; color a beautiful glossy rose, tinged purple. Flavor

very agreeable; splendid slicing variety. A good general cropper, and one of the very best for greenhouse growing, or first-early crop.

**GOLDEN PONDEROSA**—This grand large tomato is similar to Ponderosa in all respects, except color being a beautiful golden yellow.

**GREATER BALTIMORE, 83 Days**—Is popular canner variety. Fruits scarlet red, large, weighs 6 ounces, firm and solid. Indiana Baltimore is a strain of this variety.

**JOHN BAER**—Merits its high favor because it is one of the earliest to ripen good sized, round, smooth, bright scarlet fruits. Cannery, shippers, as well as home gardeners, prefer this variety.

**CULTURE**—Are among the most delicious of our finest vegetables and can be raised successfully from the seed with a little care and attention. Sow the seed in the hot-bed, shallow boxes or flower pots, about six weeks before time for transplanting in the garden or field. About March is the usual time for sowing. In May, set in the open ground about 3 feet apart each way. Is a good idea to stake or trellis the fruit. One ounce will give 1,500 plants. Use 4 ounces to the acre for transplanting.

**ACME (Early Detroit) 80 Days**—Is still a favorite among shippers and home growers. Its uniform, smooth, medium sized purplish pink fruit grows in clusters of 4 or 5, is solid, free from cracks and a good shipper. Flesh is fine in texture, and slightly acid.

**BONNY BEST**—Recommended by the U. S. Department of Agriculture as one of the best red sorts. Fruits are of bright scarlet red of medium size, weighing 5 to 6 ounces each, borne in clusters of 5 or 6. Plant **BONNY BEST** to follow **EARLIANA**.

**BREAK O' DAY, 70 Days**—Fruits medium large, globe shaped, orange red and smooth.

**CHALK'S EARLY JEWEL**—Practically identical to Bonny Best.

**CRIMSON CUSHION (Beefsteak, Red Ponderosa), 100 Days**—Same general quality and description as Ponderosa except scarlet color.



**JUNE PINK**—Some call it a Pink Earliana, as it is similar in habit to this famous sort. Is characterized by its large pink fruit, which often weighs 5 to 6 ounces. When pink fruit is preferred, this is the choicest selection.

**MARGLOBE**—Only recently introduced but has become one of the best general purpose tomatoes, equally valuable for shipping and the home garden. Fruits are large, of deep scarlet color, globe-shaped, smooth, solid and of fine quality.

**OXHEART**—Is a large variety, often weighing 10 to 14 ounces. Fruit is heart-shaped, pink, with solid flesh and very few seeds. Home gardeners who want a large tomato and distinctive shape, select Oxheart.

**PONDEROSA**—One of the largest tomatoes yet produced, frequently weighing 10 to 15 ounces. The fruit is crimson-purple in color, with very solid, luscious flesh and small seed-cells. Fine for the family garden and for the market. A fine slicing tomato, being very fleshy.

**PRITCHARD (Scarlet Topper)**—Mid-season sort, valuable for both home and market garden. Fruits are light scarlet, globe-shaped, smooth and solid.



Tomatoes—John Baer

**RUTGERS, 73 Days**—A new popular bright red globular sort, quite smooth, fruits averaging 6 to 8 ounces. While a canner sort, is an all-purpose variety of wide acceptance.

**STONE**—One of the best main-crop, red tomatoes. The fruit is large, smooth, bright scarlet, of fine quality, having little core. A heavy yielder of uniformly large fruits, and has proved to be a tremendous money-maker everywhere. Fine for canning or the home garden, and long considered the standard main-crop tomato for all purposes.

### SMALL-FRUITED TOMATOES

These are easily grown, immensely productive, and very delicious for preserves.

**YELLOW PLUM**—Size and shape just like a plum; of a bright lemon-yellow.

**YELLOW PEAR**—This is an attractive, small-fruited tomato of typical pear shape. Enormously productive and the fruits make excellent salad or may be used for marmalade. They are sweet and delicious.

**PEACH**—The fruits average 1½ inches in diameter. The skin is covered with a slight bloom, and is of beautiful pinkish coloring.

**YELLOW CHERRY**—The small yellow fruits are born in clusters, each averaging half an inch in diameter.

**RED CHERRY**—Attractive small fruits of a bright, scarlet color. Sweet in flavor and fine for marmalade.

**RED PEAR**—The fruit is bright red, of true pear shape. Rich and distinct in flavor.

**STRAWBERRY or HUSK TOMATO**—The small, sweet yellow fruits are each enclosed in a husk. Fine for preserves.

## TURNIPS

**CULTURE**—Sow early varieties in April, in drills 12 to 18 inches apart. Cover seed ½ inch and thin out to 4 to 6 inches in the row. Cultivate frequently. For succession, sow at intervals until the last week in May. For fall or winter crop, sow in July or August in drills or broadcast. Use one ounce to 250 feet of drill; 1½ pounds per acre in drills or 2½ pounds broadcast.

**COWHORN (Long White), 70 Days**—Mainly used as a stock-food, but of excellent quality for table use. It is a rapid grower, and is fine for turning under with crimson clover as a green manure crop. The roots are large, long, 10 to 12 by 3 inches, of carrot shape, and grow partly above the ground.

**GOLDEN BALL**—A rapid grower of excellent flavor; bright yellow color; good keeper and a superior table variety or for stock.

**LARGE YELLOW or AMBER GLOBE**—A beautiful variety of large size and regular shape. The roots are almost round, smooth and form a single tap-root. The skin is even and smooth, of a pale amber color. The beautiful creamy yellow flesh looks very attractive and is fine grained and free from hard fiber.

**PURPLE-TOP MILAN, 42 Days**—This splendid turnip is the earliest in cultivation. The bulbs are flat, medium size, smooth, and free from rootlets, with thin and crisp white flesh of excellent flavor. The upper portion of the bulb is a rich purple, while the lower half is pure white.

**PURPLE TOP STRAP LEAVED**—The most widely cultivated and best known variety; fine grained, never stringy and of mild flavor. It is white below with a bright purple top; flesh white, leaves short, narrow and will mature in 55 days. Desirable for the home garden or market.

**PURPLE-TOP WHITE GLOBE, 60 Days**—An excellent keeper and fine to grow for stock-feeding as well as for table use. The turnips measure 6 inches and more in diameter, and are of perfect globe form. They are clear, creamy white below and rich purplish red above. The white flesh is firm, crisp, and of mild flavor.



**SEVEN TOP (Winter Green)**—Used extensively for winter greens; does not produce a good bulb; desirable only for its tops.



Turnip—Purple Top White Globe

**SHOGIN or JAPANESE, 42 Days**—A new useful variety with large edible leaves and smooth globular roots, white throughout, flavor mild and tender.

**SNOWBALL, 40 Days**—It is round, white roots, which are crisp, sweet and tender, suggests a snowball.

**WHITE FLAT DUTCH**—An early white-fleshed strap-leaved variety; for quick growth, mild flavor; is best for the family garden in the spring, also grown for a fall crop. Medium size; matures in about 50 days. Skin is clear white; flesh excellent, mild, juicy. A good keeper.

**WHITE EGG**—An egg-shaped variety that grows to good size and matures very quickly. The skin is thin and white and the flesh solid and fine-grained. Fine for either spring or fall planting and a very good keeper.

**WHITE MILAN, 42 Days**—Entire bulb of a soft creamy white. Small tops and with a single small tap-root. Flesh pure white, fine grained, sweet, and tender. The earliest white turnip, very smooth and handsome.

## RUTABAGAS OR SWEDES

**CULTURE**—Sow the seeds a month earlier than turnips. Rutabagas should be sown on ground enriched with well rotted manure, in drills  $2\frac{1}{2}$  feet apart, and should be thinned to 6 to 8 inches apart in the row.

**AMERICAN PURPLE TOP (Long Island)**—Leading yellow variety; very productive; unsurpassed for stock feeding. Has the good quality of growing to a very large size and yet remaining solid and fine-grained. The yellow roots are purple at the top and oblong in shape, with short taproot, and the flesh is deep yellow, mild, and sweet. Keeps well until spring. Seed resembles that of turnips.

## NASTURTIUMS

Few plants are more easily grown or remain longer in bloom than the Nasturtium, with its large shield-shaped leaves and beautiful irregular flowers, having long spurs and brilliantly colored petals. In favorable soil, flowers are produced in abundance throughout the season. Seed is usually sown outdoors as soon as the weather is warm and settled, in the rows where the plants are to remain. Well pulverized soil, preferably well drained and moderately rich, should be used and the seed covered with about one inch of fine soil, firmly pressed down. A sunny situation is essential for free blooming. If the soil is very rich, the plants give a large amount of foliage, but few flowers.

**DWARF**—Two months from sowing, these neat, compact plants are covered with gorgeously colored flowers, and they continue to bloom the entire season. The foliage is very attractive and the plants rarely reach a height of more than 1 foot.

**TALL**—These reach a height of 8 to 12 feet and are fine for trailing over stone walls, trellises, fences, and the like; they can also be grown as pot-plants for winter blooming, as screens, or as trailers for hanging-baskets and vases. The gorgeous coloring of their blooms and their long season of flowering place them among the most important plants for the garden and home grounds.

## SWEET PEAS

These lovely flowers are steadily growing in popularity, and each year sees great improvement in color, shape, and number of blooms to a stem. Plant early, just as soon as the ground can be dug and is not sticky. If you are growing sweet peas every year, prepare young ground in the fall, and dig 18 inches deep, mixing manure thoroughly in subsoil. The surface soil in which the seed is sown should not contain manure. Sow seed three inches deep if on sandy soil, or two if in clay. The roots should not be allowed to become too dry. Water applied once or twice a week, preferably early in the morning or in the evening, is better than light sprinkling more frequently.

**SPENCER**—These are sometimes called the "Orchid-Flowering Sweet Peas." They have very large flowers with waved or fluted petals. A great improvement on the old variety of Sweet Peas, with all their beautiful coloring.



# FARM SEEDS



Alfalfa

## ALFALFA SEED

The origin of this wonderful plant is lost in the mists of history. It was cultivated by the Greeks and Romans, 470 B. C., probably originating in Persia. Since, it has spread over most of the civilized globe, being extensively cultivated in Argentine, Chili, Italy, France, Spain, Germany, Siberia, Canada and the United States. Exceeded only by Timothy and Red Clover, it is the third most important forage crop in America. It has long been the main perennial forage crop in the semi-arid regions and great plain districts of the West. It is now crowding Red Clover for popularity in many parts of the Central West and East and also growing to advantage in the favored sections of the South.

**ADVANTAGES**—For a general purpose forage crop, Alfalfa has no superior, in this country. For Hay, it is unsurpassed. For Pasture, it has a large carrying capacity of both cattle and hogs. As a soiling crop, it can be managed to yield heavy dividends. As a soil builder, it enriches the land by bringing nitrogen into the soil.

**CULTIVATION**—Requires a deep, well-drained soil, free from acid. Seed-bed should be well settled, moist and free from weeds as possible. Inoculation is recommended except in sections where the extensive cultivation of Alfalfa or Sweet Clover results in natural inoculation. One pound of Alfalfa contains about 220,000 seeds; 12 to 20 pounds to the acre is generally sown. May be sown in the spring, late summer or early fall. Seed is variously sown, either broadcast or by seeders. A nurse crop of oats, barley, wheat or rye has resulted favorably in many sections. Alfalfa should be covered  $\frac{3}{4}$  to 1 inch deep, not sown on the surface, as with some grasses and clovers.

Quality of the seed is of first importance. The origin of the seed should be known and due care taken to obtain plump berry, free

from noxious weeds and refined to test 98 to 99.50% purity and 90% growth.

Our facilities for marketing Alfalfa seed are second to none. We are among the first two or three largest handlers of Alfalfa seed in America. Our Kansas City plant taps the large producing areas of the plains of Kansas and Nebraska, together with the mountain valley districts of Utah, Colorado, Idaho, etc., our annual tonnage amounts to several million pounds. Seed recleaned and refined by us has been successfully sown in most states of the Union. We specialize in Kansas, Nebraska and Northwestern grown seed.

**CANADIAN VARIEGATED**—While a local strain of variegated ancestry, it is produced under such cold climatic conditions as to make it a most desirable strain for Northern regions. Some of the districts producing Canadian Alfalfa are in Northern Saskatchewan, reaching toward the Arctic Circle.

**COSSACK ALFALFA**—Introduced by the U. S. Department of Agriculture from Russia. It has merited considerable attention in the Northern states. Like Grimm, this variegated strain is best adapted to severe climatic conditions.

**GRIMM ALFALFA**—Was introduced into Minnesota by a German immigrant by the name of Grimm, in 1837. Since that time its culture under rigorous climatic conditions has resulted in a very hardy strain, says U. S. Government Bulletin 757: "On account of its superior hardiness, the variety is particularly recommended for the northern part of the great plains region and all parts of the Northwest, where little protection is afforded by the snow. The greater cost of the Grimm seed, and the inability to produce a large yield of hay in a mild climate, as the common alfalfa, will have a tendency to confine it to the more northern states."

**KANSAS GROWN**—On the great prairies



of Kansas is produced a hardy, dry land strain, which has given satisfaction under the rigorous winters of Wisconsin, New York and other northern states. Kansas alfalfa is widely known for its hardiness, productiveness, high purity and strong germination. Much Kansas grown seed is used in the coldest states and tests have shown its results with the hardest origins.

**NEBRASKA GROWN**—While produced a little farther north, it is thought by some to be more winter hardy, but our experience indicates that in quality, hardiness and productivity it gives much the same result as Kansas origin. Select lots of Nebraska grown seed are often marketed under the trade name of Nebraska 12

**NORTHWESTERN GROWN**—This seed grown in the high altitude mountain valleys of the Northwest is inured to icy winter blasts. The temperature oft-times touches 25 below zero. Both soil and climate are fitted

to produce in large quantities a hardy, prolific, heavy hay-yielding strain of plump, fine seed. Our seed grown in the heart of this producing section, insure the pure article refined to the highest purity. We can supply regional strains of Montana, Idaho and Utah origins.

**OKLAHOMA GROWN**—Produced in northern and western Oklahoma. This is especially adapted for sowing in all that district lying east and south of the producing belt as well as much of the corn belt section. It is characterized by high purity, attractive color and heavy hay yield.

**PERUVIAN ALFALFA**—There are two strains, Hairy and Smooth. They differ from other Alfalfas in particular that they are rapid growers and produce heavy hay crops. Their habitat is in the South and Southwestern regions of mild climate as they are not winter hardy.

## CLOVERS



Yellow Sweet Clover

**MEDIUM RED CLOVER**—Has been styled the corner stone of old world and new world agriculture. Alone or in mixtures, for hay or pasture, or, in rotation, it is the most important legume crop in Canada, Northern America and Europe. Stock thrive on it; for hay or pasture, it is ideal. Two crops of hay are generally produced or one crop of hay and one

of seed. May be seeded in the spring or fall, determined by soil or climatic conditions. Should be covered 1 to 1½ inches deep. As it has an extensive root system, extending 5 to 6 feet, a deep soil is advisable. Top dressing with manure adds to the success of the crop. Alone 8 to 12 pounds to the acre is sufficient, under normal conditions. This amount of seed



is often sown mixed with 10 to 12 pounds of Timothy to the acre. It is a biennial or two-year crop. Due care should be exercised in selecting seed. Why experiment when our seed is tested for purity and growth?

**MAMMOTH RED CLOVER or SAPLING—**

Grows ranker than Medium Red Clover. Is valuable for fertilizing purposes on this account. Makes good hay, if cut early and excellent for grazing. One crop of hay per annum is the rule.

**ALSIKE or SWEDISH CLOVER—**Is a long lived perennial and seldom winter kills. Thrives under conditions that will kill out Red Clover, enduring cold, heat and succeeding on a variety of soils. Hay consists of 60% leaves and 40% stems. Reaches a height of 2 to 2½ feet. Requires 6 to 8 pounds to the acre, seeded alone. A bushel of seed weighs 60 pounds. Average yield of seed is 3 to 5 bushels to the acre.

**WHITE DUTCH CLOVER—**Differs from Red or Alsike clover, in that it is a low close-growing clover with solid stems, rooting abundantly on the surface of the ground. Grows best in cool, moist sections, but persists in the South during the hot summers. Grows well in shady places. Usually sown with other grasses for lawns or permanent pastures. Grows rapidly and stands close cutting, making it a most valuable grass in a lawn mixture. When sown alone, 6 to 8 pounds to the acre is usual rate.

**SWEET CLOVERS**

**SWEET CLOVER (*Melilotus Alba*)—**Only a few years ago, Sweet Clover was considered a weed pest. Today, it is counted one of our most valuable forage plants, having spread over much of the United States and Canada. Thrives well in both humid and semi-arid regions. Is a biennial plant, growing seedlings 2 to 4 feet high, with a deep root the first season. Quite early the second season, it begins its growth and produces stems 6 to 12 feet high, bearing white sweet scented flowers.

**SWEET CLOVER** has been successfully utilized for pasturage, hay and green manure. Provides excellent pasturage for all kinds of stock, especially for hogs and cattle. Will carry 20 to 30 head to the acre. For hay, should be cut as the first blossom appears, as later, the stems tend to become woody. In the North, one hay cutting or one of hay and one of seed may be secured. In the South, three cuttings of hay or two of hay and one of seed may be harvested. Yields of hay are reported from 1½ tons to 3 tons per acre. As a legume, Sweet Clover brings nitrogen from the air into the soil. For green manure, it is probably unsurpassed. Authorities claim plowing under a crop of Sweet Clover is equal to the application of ten loads of manure to the acre. May be plowed under in the fall or spring of the first or second season after utilizing for hay or pasture. The chief supply of seed is grown in Kansas, Nebraska, Dakota and Canada.

**In planting, four things are important:**

- 1—A well-firmed seed bed.
- 2—Scarified seed, on account of the prevalence of hard seeds.

3—Inoculation with Nitragin.

4—15 to 20 pounds to the acre of seed should be used.

**YELLOW BLOSSOM (*Melilotus Officinalis*)**

—Belongs to the same family and grows much the same as the White Blossom, but is about two weeks earlier. Is somewhat smaller and less leafy.



Red Clover

**LESPEDEZAS**

The Lespedezas have grown greatly in popularity and spread over a wide area during the last few years. Their multiple advantages are finding general acceptance through much of that region in the Central and Southern part of the United States. They supplement Clovers and Alfalfas where stands are not readily obtainable or where Lespedeza is better suited to the soil and climatic conditions. They are of a special value in reviving wornout and depleted soils. As with other legumes, they harness the nitrogen in the atmosphere through their tiny root nodules. While Lespedezas are produced with adapted strains in Northern Iowa and Illinois, the great expansion in acreage has been in Missouri, in the southern half of Iowa, Illinois and Indiana, as well as in Virginia, North Carolina, Tennessee, Kentucky and Mississippi. They are strongly drought resistant but make little growth under this condition, reviving with later rains.

Lespedezas are easy to grow, no special seeding methods are necessary. They may be seeded alone or in grain. While extensive preparation is unnecessary, sufficient soil should be exposed so that the crop will take hold. Except in those sections where the bacteria that produces nodules is already distributed, the seed should be inoculated. For hay purposes a heavy seeding of 20 to 30 pounds to the acre is desirable although a lighter seeding will establish the crop the first season and a heavier stand will obtain the following season.

Lespedezas are primarily pasture plants. They fit in well with Red Top, Orchard, Kentucky Blue Grass in the North and with Bermuda, Dallas and Carpet Grass in the South. The carrying capacity is high.

Lespedeza is also a valuable hay crop carrying 55 to 60% of leaves by weight. While



the tonnage is not as heavy as with some Clovers, its adaptability to a large variety of soils often makes for an increased return. In some sections two cuttings of hay are regularly taken, and in others one cutting of hay and one of seed. We have seen stands of Korean hay ranking with similar stands of Alfalfa and Red Clover. Lespedeza hay cures more rapidly than other legumes. The feeding quality of Lespedeza compares favorably with the Clovers.

The principal varieties of Lespedeza are the Korean, Kobe, Common and Tennessee 76. Kobe and Tennessee 76 are late maturing varieties and their range, together with Common, is chiefly in the South. Korean matures earlier and its distribution is more general. It was introduced from Korea in 1919. This introduction has added millions to the farm resources of the nation. Lespedeza Sericea is a perennial strain doing well in certain locale but of limited distribution.

## GRASSES

**AGROSTIS or BENT GRASSES**—With the exception of Red Top, the chief value of the Bent Grasses lies in their ability to make a fine, even, close textured turf so necessary for golf putting greens, lawns, tennis courts, etc.

**ASTORIA BENT (*Agrostis Tenuis*)**—To this same family belong Rhode Island Bent, Oregon Bent, Colonial Bent and Brown Top. These are upright growers, spreading by means of short underground stems. It is especially adapted to special turf purposes as putting greens, fine lawns, etc.

**SEASIDE BENT (*Agrostis Palustris*)**—To this same general family belong Cocos Bent, Washington Bent and Velvet Bent. Their habit of growth is creeping or spreading by means of overground stolons or runners which rapidly cover bare places and make a close, fine, uniform turf. An abundance of moisture is necessary for the development of these species.

### RED TOP (*Agrostes Alba*)

Is a perennial grass, succeeding over most of the U. S., except in arid regions and the extreme South. It thrives on wet soils. Has thick tender roots, which form a dense sward. Stands drought better than Timothy. Makes a splendid hay crop, curing easily. Grows about 2 feet high and yields around 2 tons of hay to the acre. Desirable for lawns, in mixtures, when closely mowed. Requires a firm, mellow seed-bed and shallow planting. May be sown in early spring or late summer. If our selected seed is used, 10 pounds to the acre will insure a stand. With other grasses, 4 to 5 pounds is sufficient. Weighs 14 pounds to the bushel. Spreads by means of underground stems or rhizones.

### KENTUCKY OR MISSOURI BLUE GRASS (*Poa Pratensis*)

As a lawn grass in the North, also as the chief pasture grass on good soils, Blue Grass

ranks first. It grows slowly at first and does not form a good sod until the second season. It blooms once a year. Blue Grass pastures start up early in the spring and remain green until late fall. They provide the sweetest, most nutritious pasturage for stock, improving with each season's growth.



Blue Grass

After Timothy, Kentucky Blue Grass is the most famed grass in America. As a pasture grass is second to none. Because of its trade name, the impression is prevalent that this grass is a native of Kentucky. On the contrary, it is a native of the old world and grows there naturally. The prefix Kentucky probably came about because for many years the chief seed production was in that state. Of late years, the seed production has shifted and now a large part of the annual crop of seed is harvested in Missouri, Iowa, Nebraska and Minnesota. We own and operate a large number of special stripping machines. Our seed is sun cured to prevent heating, which weakens germination, then threshed, cleaned and graded by our own special process. Recleaned stock from our plant is shipped into most northern states and exported to Europe and Australia.

**SEEDING**—When sown alone, 15 to 20 pounds per acre is recommended. A satisfactory method is to sow in the fall with Timothy and Clover. The field is cut for hay two years, then pastured, when the Blue Grass occupies the land. For lawns, 1 pound to 300 square feet gives maximum results. Blue Grass is slow to germinate, taking 25 to 35 days. Its viability is easily spoiled when curing and also it is sometimes adulterated with cheaper grasses. As original handlers, our stock is dependable. Fourteen pounds to the bushel.

### BERMUDA GRASS

This splendid southern grass makes a rich green lawn, withstanding dry weather. Is popular in Oklahoma, Texas and other southern states for both lawns and pasture purposes. Will not last over our cold winters.



### BROME GRASS (*Bromus Inermis*)

This is a valuable perennial grass, originating in Russia, is long lived, especially suited to cold and dry conditions. For Kansas, Nebraska and the Dakotas, it is strongly recommended. Has a dense sod with deep roots. Stems are erect, growing as high as four feet, having a heavy growth of leaves. Hay yield improves each year up to the third season. Three tons of hay to the acre are reported. It starts early in the spring and lasts well into the autumn, making a splendid pasture. Cattle thrive on it. It is one of the most palatable of all grasses.

Yields 250 to 450 pounds of seed per acre. One bushel (14 pounds) is sufficient to secure a satisfactory stand. For pasture along, 20 to 25 pounds is better than light seeding. Weighs 14 pounds to the bushel.

### CHEWINGS FESCUE (*Festuca Durinacula*)

—Is used mainly in this country for lawns and golf turf. It is a genuine perennial and permanent when once started. Requires a cool climate and fairly heavy rainfall. To the same

general family belongs Red Fescue and Sheep's Fescue. Although widely distributed in Europe, these have not found general acceptance in the United States. Red Fescue is a long-lived perennial used on moist, sandy soils. Under favorable conditions it makes a dense growth and sometimes a height of 2 feet or more.

**CRESTED WHEAT GRASS**—This recent introduction from the steeper region of Siberia is finding general acceptance in Western Canada and the corresponding region of the United States. It is a long-lived perennial. Botanically it is closely allied to Slender Wheat and Western Wheat Grass. It enjoys a very extensive root system, penetrating often to a depth of 8 feet, provided the soil is moist to that depth. It is adapted to a wide range of soils, extremely drought and winter hardy. Because of these factors it is a valuable hay and pasture crop in the Dakotas, Montana and adjacent states. It may be sown either in the fall or spring about  $\frac{1}{2}$  inch deep in amount of 15 to 20 pounds to the acre.



Field of Timothy

### TIMOTHY (*Phleum Pratense*)

When we consider that four times as much Timothy is cultivated as all other hay grasses combined, its place in American agriculture may be realized. This wide and favorable distribution is caused by the following factors:

Splendid hay value; adaptability to a wide range of soil and climate; inexpensive seed; ease with which a stand is secured; easily cut and cured. Has shallow, fibrous roots, growing in stools. Grows 2 to 3 feet high. Average yields of hay are about 2 tons to acre. Succeeds best with a fine, well-firmed seed bed.



May be sown in the spring or fall. A dressing of manure or fertilizer is desirable, as Timothy exhausts the nitrogen in the soil. If sown with Red Clover or Alsike, the clovers supply nitrogen to the soil and aid the growth of the Timothy. When sown alone, 12 to 15 pounds per acre are required. Is not suitable for permanent pastures alone, because it runs out in about 3 years, but is valuable with other grasses in a permanent pasture. Iowa, Missouri, Minnesota and Illinois are the great seed producing states. Our location at the door of the main producing area enables us to buy our stocks to the best advantage, both in quality and price. Weighs 45 pounds to the bushel.

### TIMOTHY AND ALSIKE

The separation of these two seeds, when grown together, is impracticable. As this mixture excels straight Timothy in feeding value, and recommended by the experiment stations, we offer these varieties, as harvested, after cleaning.

### ORCHARD GRASS (*Dactylis Glomerata*)

Also known as Cocksfoot. Is a valuable perennial grass grown more or less in most states in the Union and especially for seed in Kentucky, Missouri and Virginia. Is a bunch grass and doesn't form a compact sod. Stands more heat than Timothy, but is more easily injured by cold winter. Grows very early in the spring and until late fall. It grows well in shady places, which, no doubt, has given rise to its name. It makes a splendid, permanent pasture. When harvested for hay, should be cut as it reaches full bloom, as the stems tend to become woody. After the harvest of the first hay crop, a second rapid growth is produced, making a second crop of hay. Yields 1 to 2 tons per acre. Requires 15 to 20 pounds of our select seed to the acre. Weighs 14 pounds to the bushel.



Meadow Fescue

### MEADOW FESCUE (*Festuca Pratensis*)

Is also known as English Blue Grass. Although a standard grass in Europe, it does not enjoy the wide distribution in this country it merits. Meadow Fescue is a hardy perennial, with bright green succulent leaves, yielding on the average about 2 tons of good quality hay to the acre. It grows 15 to 30 inches in height and is useful as a pasture grass, coming on

early in the spring and lasting late in the fall. This grass is as hardy as Timothy, thrives on moist or even wet soils, and, like Orchard Grass, grows well in shady places.

Requires a well worked fine seed bed. Usually seeded in the early fall, it may be seeded in the spring—15 to 20 pounds to the acre is the usual amount sown. Grass is commonly cut with a binder and cured in shocks, then threshed with ordinary grain thresher. Seed yields per acre range from 6 to 25 bush-



els. As the chief source of the seeds is in Eastern Kansas, we handle large amounts. Weighs 22 pounds to the bushel.

### PERENNIAL OR ENGLISH RYE GRASS (*Lolium Perenne*)

Has a wide distribution in Europe, but not freely used in this country, except in pasture and lawn mixtures. It is the oldest cultivated meadow grass. It does well wherever Red Clover thrives. In winter hardiness it is about equal to Orchard Grass. It does best on a rich, moist, well-drained soil and is not adapted to sandy soils nor will it endure standing water near the surface. It may be sown either in the fall or in the spring. For hay, one good cutting may be secured and a second small cutting. Where the winters are not too severe it keeps growing during some part of the winter and early spring and while a very fair pasture grass, in regions of sufficient moisture it will not stand too close competition in mixtures with the taller grasses. In favorite sections it is becoming more popular in this country.

### ITALIAN RYE GRASS (*Lolium Multiflorum*)

Rarely lasts over two years. Cultivated extensively in Europe and the Argentine, where, under exceptional manuring and irrigation, heavy hay yields are recorded. Normal yields in this country are about 2 tons to the acre. Grows very rapidly and recovers quickly after cutting. Besides its value as an annual hay crop, it is much used for lawns and temporary pastures. Weighs 24 pounds to the bushel and 25 to 30 pounds to the acre should be sown.

## LAWN GRASS

### ROYAL QUALITY LAWN MIXTURE—

What is more attractive than a well kept lawn and how much difficulty many experience in getting a first-class green sward. A well kept lawn not only adds to the beauty and joy of a home, but rewards the owner in increasing the value of the property. Although a lawn may be obtained by sodding, this method is rarely satisfactory, because the soil does not contain the proper grasses to make an enduring velvety lawn. It is most important that there should be sown such a mixture of early and late grasses that a velvety green carpet be insured the whole season through. Many of the finest lawns, golf courses, cemeteries, parks and private estates in this and other sections were sown with our grass seed. Our Royal Lawn Grass is a blend of the finest domestic and imported grasses, scientifically blended, so as to insure a green sward from early spring to late fall. Our blend includes: Kentucky Blue Grass, White Clover, Red Top and the Rye Grasses and Fescues. Sow 1 pound to 300 square feet, 5 pounds to 1500 square feet, 25 pounds to a quarter of an acre. For old lawns, to patch or replenish, use around one-half these amounts. May be sown any time when there is sufficient moisture, the early spring is the best time. Prepare the ground, sow the seed broadcast and rake it in. If rolled afterwards, so much the better.

**SHADY SPOT MIXTURE**—Bare spots under trees and shrubs disguise an otherwise attractive lawn. This mixture is composed of grasses that do well shaded and add to the beauty and symmetry of the lawn.

**GOLF COURSE MIXTURES**—Our ample stocks and wide experience in handling and refining grass seed enable us to combine successfully the necessary imported and domestic grasses for Golf Course purposes. Our regular mixture withstands close cutting and tramping. We offer special mixtures for the demands of any soil or climate.

## PASTURE MIXTURES

**ROYAL PERMANENT PASTURE MIXTURE**—This combination of Grasses is adapted to corn belt conditions and does especially well in Missouri and Eastern Kansas. It will out-last a combination of Timothy and Clover. Can supply different formulas adapted to any section of the U. S.

## SEED CORN

Our seed corn is grown for us in Kansas, Missouri and some varieties in Iowa and is the choice selection of the crop. Ears are hand-selected, butted and tipped before shelling. Tests are made to determine the germination and moisture content. This selected tested corn does not compete in price with the cheaper commercial grades.

**HYBRIDS**—Of the good work done by our agronomists in promoting scientific agriculture and increasing crop production the development of Hybrid corn stands out as a monumental work. Millions of bushels of corn have been added to our annual production as a result of their breeding. We can supply the various state certified Hybrids as well as those developed by large seed corn growers adapted to your particular section.

### OPEN POLLINATED YELLOW VARIETIES

**REID'S YELLOW DENT, 100 Days**—Our selection of this splendid, popular, yellow Dent variety should suit you. Ears average 8 to 11 inches in length with 20 or more rows of kernels on the ear. Ear is small and grains grow close together. Grains almost covering butts and tips. Leaves and stalk make excellent silage and fodder.

**IOWA GOLD MINE, 90 Days**—Is good all-purpose corn, ripening early. Ears are medium length, with small cob. Has deep grain of a beautiful golden yellow. Good silage and fodder corn.

**PRIDE OF THE NORTH, 90 Days**—Is commended on account of its extreme earliness. Ear is not so large as the later varieties, having 14 to 15 rows, growing 8 to 10 inches in length.

**LEAMING, 90 Days**—A large, handsome deep grained corn producing good ears. Husks and shells easily.

### WHITE VARIETIES

**BOONE COUNTY WHITE, 110 Days**—Is splendid yielder on strong land. Grows ears 9



to 11 inches long with 18 to 20 rows. Has large white grains.

**ST. CHARLES (Red Cob), 110 Days**—Is fine silage corn. Has pure white kernels on a red cob. Yields heavy of both grain and silage.

**IOWA SILVER MINE, 100 Days**—A beautiful hardy white corn, maturing in about 100 days. Grows a stalk about 6 feet high, with ears measuring 10 to 12 inches, having 18 to 20 rows of pure white kernels.

### HAIRY OR WINTER VETCH

Although an annual, it re-seeds itself and will continue to come up year after year on the same ground. It is very hardy, enduring heat, cold and drought. Succeeds on most any kind of soil. As farmers become better acquainted with this valuable forage plant and soil builder, it will increase in popularity. Sow either in the spring or fall with rye or oats as a nurse crop. Yields 12 to 20 tons of green fodder per acre. Fifty pounds of seed required to seed an acre. We urge all to sow this most valuable plant. Sown in the fall, it remains green under the snow and provides soiling and early pasture.

### DWARF ESSEX RAPE

This valuable forage plant should have a larger place in farm economy. No plant furnishes forage for as little work and expense as Dwarf Essex Rape. Makes excellent feed for fattening hogs and sheep and for milk pro-

duction in cows. Good for young lambs at weaning time. Valuable as a catch crop, following early maturing grain, as wheat or barley. May be sown in spring with the grain crop, taking the field after grain has been harvested. A common practice is to plant a patch of Rape early in the spring and insure an all-summer supply by successive plantings. In the South is usually sown in September or October for winter pasture. In the North, usual time is from the first of May to the last of July. When planted in rows, use 4 to 5 pounds to the acre; if broadcast, sow 6 to 8 pounds.

### BUCKWHEAT

**SEEDING**—Good well-drained soil insures best returns on this crop. When planted in drills, sow 25 pounds to the acre; broadcast, use 50 pounds per acre; will, under favorable conditions, mature a crop in 8 to 10 weeks.

**JAPANESE**—Ripens slightly later than Silver Hull, but a better yielder. Kernels are larger than common buckwheat. Yields 35 to 40 bushels to the acre when harvested.

**SILVER HULL**—Grain is a light gray color, with a thin husk. Is a decided improvement over ordinary buckwheat. Excellent milling variety.

### SUNFLOWER

**MAMMOTH RUSSIAN**—Produces heads 8 to 12 inches in diameter. Sow in rows 24 to 36 inches wide, using about 5 pounds of seed to the acre. For silage, use 10 to 15 pounds of seed per acre.

## FORAGES

### SUDAN GRASS (Andropogon Sorghum)



Sudan Grass

Sudan Grass was introduced by the U. S. Department of Agriculture from Egypt in 1909 and has since been distributed over

many states of the Union. It is distinctly an annual and has none of the underground root stocks which make Johnson Grass objection-



able. Has slender stocks, about the size of a lead pencil, which grow from four to eight feet high.

Like Sorghum, Sudan thrives best in a warm climate, but may be grown successfully in most sections of the country. Two to four cuttings are obtained, depending on climate and soil conditions. In regions where Clover and Timothy thrive, it is valuable as a catch crop, although it is favored by many as a hay grass. But, in the semi-arid regions of the West and Southwest, it has an increasing place as a valuable hay and pasture crop.

Splendid results have been obtained mixing Sudan hay with Alfalfa for dairy cows. Stockmen have been warm in its praise as a pasture for cattle and hogs. Yield of cured hay varies from 3 to 10 tons of cured hay per acre. In humid regions, it has yielded excellent results grown with cow peas or soy beans.

Sow in the spring as soon as the soil becomes warm, generally about corn planting time. When sown in rows, 6 to 10 pounds are required per acre; broadcast, around 20 pounds is standard.

## SORGHUMS

Sorghums are grown for four purposes: Grain, forage, syrup and brooms. Cultivated more or less in most states of the Union, they also provide food as well as forage for the teeming millions of Asia, Africa and other countries.

Climate and soil requirements of the sorghum are much the same as corn. The essential difference lies in their special adaptability to sections having a warm summer climate. They are peculiarly drought resistant, remaining green with excessive heat and insufficient soil moisture.

Should be sown after the soil is warm in the spring and may be planted any time in the summer, with sufficient moisture to mature before frost. Sown in rows to be cultivated, or broadcast or drilled thickly for hay in the usual seeding method. When planted in rows, 10 pounds of seed per acre is the standard, or 50 to 80 pounds, if broadcast.

Yields of forage vary with maximum of 12 to 20 tons green and 4 to 8 tons dry forage.

### SWEET SORGHUMS or SORGOS

The sorghums are recognized by reason of their sweet sap or juice from which syrup is sometimes made and which makes tasty, succulent forage for stock.

#### EARLY AMBER TYPE

Is earliest variety and succeeds from Minnesota to Texas. Seeds are reddish yellow, nearly enclosed by shiny black hulls.

#### ORANGE TYPE

Usually matures two weeks later than Amber and a week earlier than Sumac. Has compact heads, 5 to 8 inches long. Seeds are reddish yellow, becoming paler when ripe, with reddish to black hulls.

#### RED ORANGE TYPE

Introduced from Australia. Distinguished by its dark red hulls. Matures later than Amber, but more leafy and sweeter.

#### SOURLESS ORANGE TYPE

So called because of the idea that the juice in the stem does not ferment as quickly as

other sorts. Hulls are pale brown, half enclosing the straw colored grains.

#### SUMAC OR RED TOP TYPE

Have erect dense heads 6 to 9 inches long. Seeds are small brownish red with dark red or black hulls. Greatly esteemed in the Southwest for fodder purposes.

#### JAPANESE HONEY TYPE

Have tall, juicy, very sweet stems. Hulls reddish with dark red brown grains. Popular for both syrup and forage. Matures late.

#### TEXAS-SEEDED RIBBON OR GOOSENECK TYPE

Has dense heads 5 to 9 inches long, stem tall and stout, 12 to 14 inches high, hulls black, grains reddish yellow.

#### ATLAS SORGO

Atlas Sorgo was selected from a field cross between Sourless Cane and Black Hulled Kaffir. Grows from 7 to 10 feet tall and requires about 125 days to mature. Has sturdy, leafy, juicy, sweet stalk. Heads are compact, somewhat cylindrical in shape and filled with white seed in shape and size similar to Kaffir. It combines the good points of both Kaffir and Cane with a superior yield of both Forage and Grain. Stockmen are loud in its praise for ensilage purposes.

## NON-SWEET SORGHUMS

**KAFFIR CORN**—Of the Kaffir varieties, Dwarf Blackhull is most desirable for both grain and forage. Heads are 10 to 14 inches long with white grain and black hulls. Stalks grow erect 6 to 10 feet high. On good land, Kaffir produces 30 to 50 bushels per acre. Requires 110 to 135 days to mature seed.

**HEGARI**—Produces a juicy, sweet stalk; heads are cylindrical in shape from 7 to 8 inches long and 3 inches in diameter. Seeds are white with reddish brown markings about the size of Kaffir. Should mature in 100 to 110 days.

**FETERITA**—Introduced from the Sudan; has become very popular in the Southwest. Matures about one week ahead of Milo. Has slender stems, 5 to 7 feet high, erect heads and bluish white grains with black hulls.



**YELLOW MILO MAIZE**—It belongs to the DURRA group of Sorghum. Is characterized by compact, egg-shaped heads, which frequently grow turned down or Gooseneck. Ripened seed in 90 to 110 days. Grains are pale yellow, with dark colored hulls. A white seeded sort has also been developed. Several strains of Yellow Milo have been developed including the Standard Tall Milo, also the Dwarf, Double Dwarf, Sooner or Sixty Day, and Wheatland Milo.

## COW PEAS

Although styled Cow Peas, this plant is really not a pea at all, but a bean. Originated in Africa. It is cultivated also in Asia, Europe, the West Indies and the United States. It is adapted to the same climatic conditions as corn, requiring, however, more heat to mature the crop. In the cotton belt territory, the Cow Pea is the chief legume grown. In the old world, Cow Peas are grown, in the main, for human food, as are the white or nearly white varieties (Blackeye) in the United States. Our main reliance on the crop is for forage or green manure purposes.

Cow Peas should be planted when the ground becomes warm, generally a week or two after corn planting time. May be broadcast, drilled or sown in rows. When broadcast, 1½ bushels is plenty, drilled, 30 to 40 pounds to the acre is usual practice. Should not be cut for hay before the first pods are ripe and may be delayed later. Hay yield ranges from 1 to 3 tons to the acre. In feeding value, Cow Pea hay is particularly high, on account of its high protein content. Cow Peas do well planted with Sorghum or Sudan. Are widely used for planting in between corn rows. Popular practice is to plant 3 pecks to the acre after the last cultivation of the corn. Sometimes Cow Peas are planted close to the corn plants, after the crop has been cultivated for the last time. Seed yield varies from 10 to 30 bushels to the acre. 60 pounds to the bushel.

**WHIPPOORWILL**—Is most popular variety grown and probably comprises half the average sown in the United States. Its seeds are buff colored, marbled with brown. Is very productive. Matures in about 85 days.

**NEW ERA**—Is earliest to mature, ripening in about 75 days. Very popular on account of its bushy habit of growth. Seeds are small buff colored, sprinkled with blue specks.

## SOY BEANS

Soy Bean is native to Asia, where it is grown for human food and oil extraction. In the United States, Soy Beans have won rapid popularity as a great forage plant. Competing with Cow Peas, they have, however, spread over a much wider area. The soil and climatic requirements are much the same as corn. They draw nitrogen into the soil and are a great soil builder. Also valuable for ensilage, hay and hogging down.

For hay, planting should take place so that the crop can be cut in September. Experiments on the feeding value of Soy Bean hay for dairy cows show a slight superiority over Alfalfa.

Crop may be pastured, particularly to hogs. Corn should be fed to balance the ration. The beans are rich in protein, equal to oil meal or cotton seed in feeding value for cows and hogs. Soy Beans are often grown with corn; three methods of planting with corn are popular: May be planted in the same hill with corn; in alternate hills in the same row; or alternate rows. A mixture of Soy Beans and Cow Peas for hay is planted in some sections, as is also the growing of Soy Beans with Sorghum in rows. A good seed bed is necessary to secure a satisfactory crop. Deep planting, together with sufficient disking and harrowing to form a firm seed bed with the upper 3 inches loose and mellow, is advisable. For hay, may be broadcast, drilled or sown in cultivated rows. For seed production, rows 36 inches apart are recommended. One bushel of seed is sufficient for 2 acres when planted in rows, while, if broadcast, a bushel or a bushel and a peck to the acre is advisable.

Soy Beans weigh 60 pounds to the bushel, and when grown for seed should yield 30 to 50 bushels of seed to the acre.

Except in the South, where natural inoculation takes place, it is advisable to inoculate the seed with some good culture, as Nitragin. Although there have been upwards of 200 varieties introduced, popular selection has narrowed the choice down to the following varieties named and a few others:

**ILLINI**—One of the most popular varieties raised in the corn belt for general commercial purposes. Is a pure line selection made at the University of Illinois from the AK variety. Description: Plants erect, stems medium, pods yellow, seeds yellow to amber yellow, matures in about 105 days.

**MANCHU**—Great all around main season sort. Grows 40 inches in height. Matures seed in about 105 days. Bean is yellow with dark scars.

**VIRGINIAS**—Grows 50 inches high; of climbing habit in growth. Matures in 125 days. Has brown seeds. A great hay sort.

**BLACK WILSON**—Grows 3 to 4 feet high. Valuable for hay and a heavy seed producer. Seeds black. Makes hay in 90 days. Matures seed in 115 days.

**JET or SABLE**—A small black-seeded sort, excellent for hay or silage. Grows 40 inches tall. Matures in 115 days. Heavy yielder.

**LAREDO**—A splendid late maturing hay bean adapted for regions with a long growing season. Gives a heavy hay yield. Seeds are small and black.



## MILLETS



Millet

**MILLETS**—Are used as human food in India and other parts of Asia, but, in this country, grown mainly for forage purposes. More or less millet is grown in every state in the Union, but the most important producing areas are in Kansas, Nebraska, Colorado, Missouri, Texas, Tennessee and the Dakotas.

Sow when the ground is warm, not earlier than two or three weeks after corn planting time. May be sown any time during the summer, with sufficient moisture and time to mature before frost. Under average conditions, the crop should mature in 50 to 60 days. From 2 to 4 pecks to the acre is recommended except for seed production when about half the amount should be used. May be either sown broadcast or in drills on suitably prepared ground. Should be cut for hay just after blooming. If fed only to cattle and sheep, may be left until its seed are in the milk stage. Is a valuable feed for cattle and sheep. Millet is probably no harder on land than any other heavy yielding crops. 50 pounds to the bushel.

**GERMAN or GOLDEN MILLET**—This variety was introduced into Tennessee from France and has since spread over the United States. Tennessee and Kansas are the chief sources of seed supply. Has produced from 2 to 4 tons of hay per acre and 40 to 60 bushels of seed. This variety has broad leaves, a large head and is most widely grown for forage purposes. Seed is yellow in color.

**WHITE WONDER**—This new sort is deservedly popular in many sections. Resembles

the old-fashioned German Millet in appearance, heavy hay growth and good sized head.

**HUNGARIAN MILLET** — Is sometimes called Hungarian Grass. It possesses a small compact head filled with vari-colored seeds, some being yellow, while others are black, white or purple. Matures between the Common and the German.

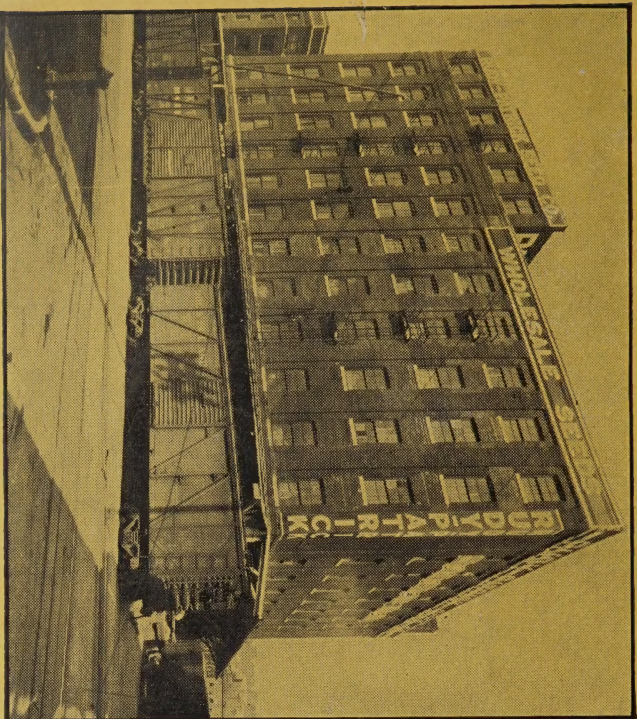
**SIBERIAN**—This introduction from Russia is largely grown in the semi-arid districts of Kansas and Colorado. In growth and hay tonnage, it is similar to Common. The seed is orange colored, except in the Kursk strain, which produces seed of a reddish cast.

**JAPANESE MILLET or BILLION DOLLAR GRASS**—Does not endure drought as well as other millets. Is a valuable forage crop, producing 4 to 7 tons of cured hay or 15 to 20 tons of green forage. Average 7 feet on strong soil.

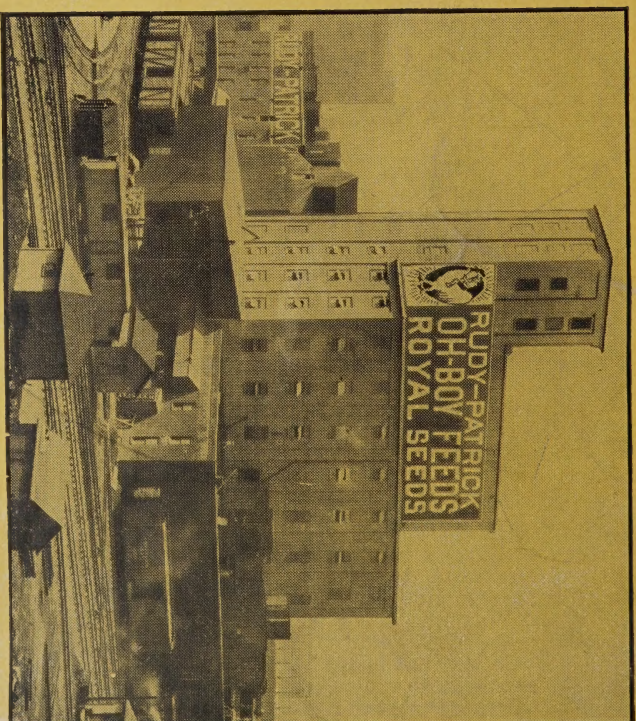
**HOG MILLET or PROSO**—Is cultivated in Russia for human food, mainly in this country as a cereal crop, used as hog feed and in poultry feed mixtures, though sometimes cut for hay. Produces large yellow seed, often 60 to 70 bushels per acre.

**EARLY FORTUNE MILLET** — Both Hog and Early Fortune are varieties of the Broom Corn Millet family, being very similar, except that the Early Fortune sort has large red seeds. These varieties are mainly grown in Kansas, Colorado and northward. Heads in 50 to 60 days.





PLANT No. 1



PLANT No. 2

# RUDY-PATRICK SEED COMPANY

ATLAS MILLS

CENTRAL INDUSTRIAL DISTRICT

KANSAS CITY, MISSOURI

